

# **GRAND AVENUE MIS PHASE II**

## **WORKING PAPER #2**

### **SOCIOECONOMIC & LAND USE DATA AND PROJECTIONS**

**Prepared for:**

**Maricopa Association of Governments**

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## **2.0 SOCIOECONOMIC CONDITIONS**

### **2.1 Introduction**

This paper provides a summary of the existing land uses and socioeconomic conditions within the Grand Avenue study area. This information will provide a baseline for the existing conditions in the study area and will be used to evaluate the potential impacts of the major improvement alternatives that are identified.

Land uses factors identified as part of this analysis include existing land use and future land use. Socioeconomic factors that were considered included current and projected population and employment for the study area. A broad range of environmental justice factors were studied as part of this analysis. Environmental justice analysis included such factors as: minorities, the elderly, persons with disabilities, female heads of household (with own children), poverty, vehicle availability, and educational attainment, as well as a metric that considered the cumulative number of these factors for a geographic area.

### **2.2 Existing Land Use**

Existing land uses were determined using the Maricopa Association of Government's Existing (Year 2000) Land Use Coverage. Existing land uses were analyzed for an area approximately one mile to each side of Grand Avenue. This area will define the "study area" for this working paper. MAG existing land use categories were consolidated to 17 categories which are summarized in Exhibit 2.1.

The breakdown of acreage and percentage of land within each of the defined land use categories is summarized in Exhibit 2.2, and illustrated in Exhibits 2.3 through 2.5.

The study area encompasses approximately 17,180 acres of land. Industrial land use accounts for a total of 2,961 acres (17 percent) of the study area, with the majority classified as heavy industrial. Residential land uses account for 7,534 acres (44 percent), commercial land uses represent a total of 1,926 acres (11 percent), vacant land contributes 1,656 acres (10 percent), and agricultural uses represent 1,500 acres (nine percent).

A total of 5,066 acres (30 percent) of the study area is within Peoria. The largest land use in Peoria's portion of the study area is residential (46 percent), followed by agriculture (22 percent), vacant land (nine percent), and commercial uses (seven percent).

A total of 6,031 acres (35 percent) of the study area is within Glendale. The major land uses in Glendale's portion of the study area are residential (42 percent), industrial (18 percent), commercial (13 percent), and vacant (13 percent).

A total of 6,082 acres (35percent) of the study area is within Phoenix. The largest land uses in Phoenix's portion of the study area include residential (44 percent), industrial (26 percent), and commercial (13 percent).

Residential land use is approximately the same for each of the three cities in the study area, ranging between 42 and 46 percent. Peoria has the greatest percentage of land in

agriculture, twice that of Glendale, while Phoenix has none. In contrast, 26 percent of the Phoenix portion of the study area is industrial, Glendale's portion includes 18 percent industrial, and Peoria has only six percent in industrial. Both Phoenix and Glendale contain 13 percent commercial land use within the study area, while Peoria contains seven percent.

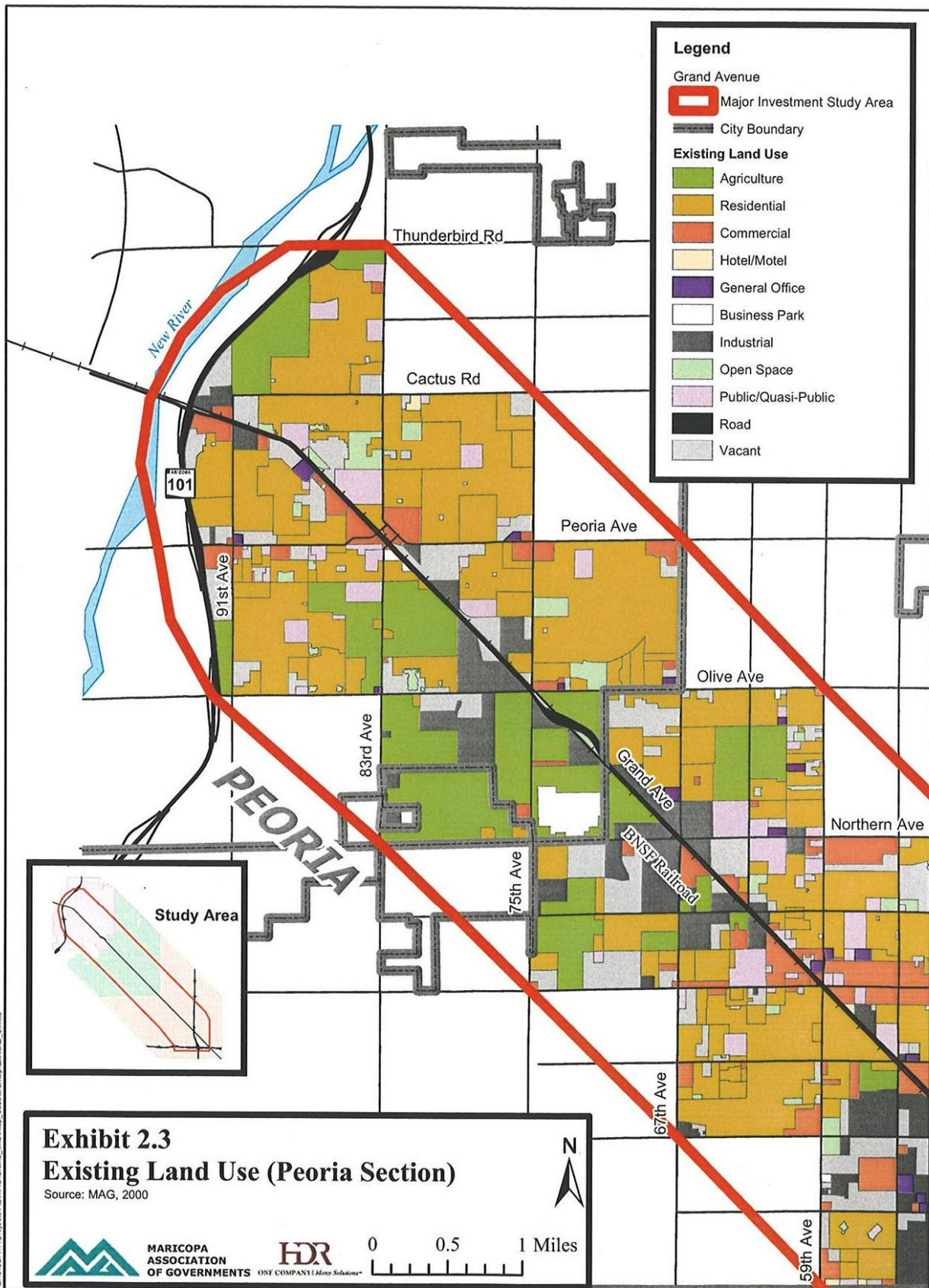
<b>Exhibit 2.1</b> <b>Existing Land Use Definitions</b>	
<b>Category</b>	<b>Description</b>
<b>Residential Land Uses</b>	
Low Density Residential	Residential districts with four or less dwelling units per acre (du/acre). A residential lot in this category ranges from 10,890 square feet (sf) to many acres.
Medium Density Residential	Residential districts with four to ten du/acre. A residential lot within this category will range from 10,890 sf to 4,360 sf.
High Density Residential	Residential districts with greater than 10 du/acre. Typically, residential units with this land designation are non-traditional detached and attached homes such as townhouses, mobile home parks, and multi-family apartment complexes.
<b>Commercial Land Uses</b>	
Community Commercial	Marketplaces that serve a geographic area from 3 to 5 miles. Typical sites range from 10 to 40 acres, and may include retail space of 100,000 to 500,000 square feet. These marketplaces may feature an anchor tenant such as a high-volume grocery or retail "superstore" outlet. Other businesses within the community commercial designation include, but are not limited to, adult businesses, night clubs, restaurants, dining and entertainment services, mixed single retail services, strip mall retail services, personal services, and mortuaries.
Neighborhood Commercial	Neighborhood-based commercial uses typically serve a neighborhood market area of up to two miles. Typical sites range from 2.5 to ten acres, and overall retail floor space of 50,000 to 100,000 square feet. These sites may feature tenants such as grocery stores, clustered commercial, personal services, and restaurant uses. Other businesses within the neighborhood commercial designation include, but are not limited to, banks and financial services, convenience retail, beauty and barber services, gas stations and liquor stores.
Regional Commercial	Regional Commercial serves a regional area. Typical sites range from 50 to 125 acres and contain between 500,000 to 1,000,000 square feet.
Hotel/Motel	A site with one or more buildings containing guest rooms or dwelling units. Tourist and visitor accommodations consisting of hotels, motels and resorts.
General Office	A site or building(s) where business activities such as administrative, clerical, professional, or service sales are conducted. Businesses within the general office designation include, but are not limited to, insurance companies, real estate sales offices, professional offices, medical offices, and multi-office complexes.
Business Park	Includes enclosed industrial, office or retail in a planned environment. Businesses within the business park designation include, but are not limited to, administrative, professional and supportive retail sales. Grouped businesses are designed to be compatible with each other and feature common traffic circulation, parking, walkways, utilities, landscaped areas and signage.

<b>Exhibit 2.1(Continued)</b> <b>Existing Land Use Definitions</b>	
<b>Category</b>	<b>Description</b>
<b>Industrial Land Uses</b>	
Light Industrial	A land use where activities are of a production, warehousing, distribution or manufacturing nature that do not contribute excessive impacts such as noxious fumes, noise, semi-truck traffic, sewer, or water contaminants into the environment. Businesses found within the light industrial land use designation include, but are not limited to, mobile home sales, warehouse, office complexes and self-storage facilities.
Heavy Industrial	A land use where business activities are of a production, warehousing, distribution or manufacturing nature that may contribute impacts (unless mitigated), such as noxious fumes, noise, heavy semi-truck traffic, and heavy sewer or water contaminants into the environment. Businesses found within the light industrial land use designation include, but are not limited to, major distribution warehouses, heavy equipment storage yards and service facilities, mobile home manufacturing and solid waste material recycling centers.
Public/Quasi-Public	These are land uses where access is open to the general public. Admission may or may not require an entrance fee. Public facilities include, but are not limited to, city halls, government facilities, libraries, public transit depots, public transit storage and service areas, and educational services (schools). Quasi-public uses include, but are not limited to, facilities such as churches, cemeteries, hospitals and trade schools. This designation may also include community centers, and power sub-stations.
Parks and Recreation	A land use where landscaped, open air activities and facilities are open to the general public for the purpose of recreation. Recreation facilities may include, but are not limited to, ball fields, hiking trails and swimming pools.
Open Space	Land set aside for the public's enjoyment, or otherwise enhances the quality of the environment. These areas may include landscaped areas, natural areas, plazas with grass and trees, fountains, and public sitting areas.
Agriculture	Land that is privately owned for the purpose of farm production
Vacant	Land that is not presently in use, but may be zoned for a particular use. This land may or may not be privately held or available for sale or purchase.
Road	Includes railroads, railyards, transit centers and freeways

<b>Exhibit 2.2</b> <b>Existing Land Use Summary</b>								
	<b>Peoria</b>		<b>Glendale</b>		<b>Phoenix</b>		<b>Total</b>	
<b>Land Use Category</b>	<b>Study Area Acres</b>	<b>Percent</b>	<b>Study Area Acres</b>	<b>Percent</b>	<b>Study Area Acres</b>	<b>Percent</b>	<b>Study Area Acres</b>	<b>Percent</b>
Residential								
Low Density	36.9	0.7%	120.8	2.0%	0	0%	157.8	0.9%
Medium Density	2,142.7	42.3%	1,890.6	31.3%	2,346.2	38.6%	6,379.5	37.1%
High Density	141.5	2.8%	534.6	8.9%	321.0	5.3%	997.1	5.8%
<i>Subtotal Residential</i>	<i>2,321.1</i>	<i>45.8%</i>	<i>2,546.0</i>	<i>42.2%</i>	<i>2,667.2</i>	<i>43.9%</i>	<i>7,534.3</i>	<i>43.9%</i>
Commercial								
Community	41.7	0.8%	368.9	6.1%	201.8	3.3%	612.4	3.6%
Neighborhood	150.7	3.0%	337.0	5.6%	182.3	3.0%	714.9	4.2%
Regional	37.0	0.7%	0	0%	0	0%	37.0	0.2%
Hotel/Motel	6.2	0.1%	10.2	0.2%	14.3	0.2%	30.7	0.2%
General Office	25.2	0.5%	57.8	1.0%	34.5	0.6%	117.5	0.7%
Business Park	91.8	1.8%	7.6	0.1%	359.2	5.9%	458.6	2.7%
<i>Subtotal Commercial</i>	<i>352.5</i>	<i>7.0%</i>	<i>781.5</i>	<i>13.0%</i>	<i>792.1</i>	<i>13.0%</i>	<i>1,971.1</i>	<i>11.5%</i>
Light Industrial	110.2	2.2%	330.1	5.5%	3.6	0.1%	399.0	2.3%
Heavy Industrial	189.4	3.7%	724.5	12.0%	1,602.8	26.4%	2,516.7	14.7%
<i>Subtotal Industrial</i>	<i>299.6</i>	<i>5.9%</i>	<i>1,054.6</i>	<i>17.5%</i>	<i>1,606.3</i>	<i>26.4%</i>	<i>2,915.6</i>	<i>17.0%</i>
Public/Quasi-Public	231.8	4.6%	318.9	5.3%	322.9	5.3%	873.6	5.1%
Open Space	137.4	2.7%	108.9	1.8%	68.5	1.1%	314.8	1.8%
Agriculture	1,097.9	21.7%	402.0	6.7%	0	0%	1,499.9	8.7%
Vacant	468.1	9.2%	766.9	12.7%	421.4	6.9%	1,656.4	9.6%
Road	157.0	3.1%	52.4	0.9%	203.3	3.3%	412.7	2.4%
<b>Total</b>	<b>5,065.5</b>	<b>100.0%</b>	<b>6,031.1</b>	<b>100.0%</b>	<b>6,081.8</b>	<b>100.0%</b>	<b>17,178.4</b>	<b>100.0%</b>

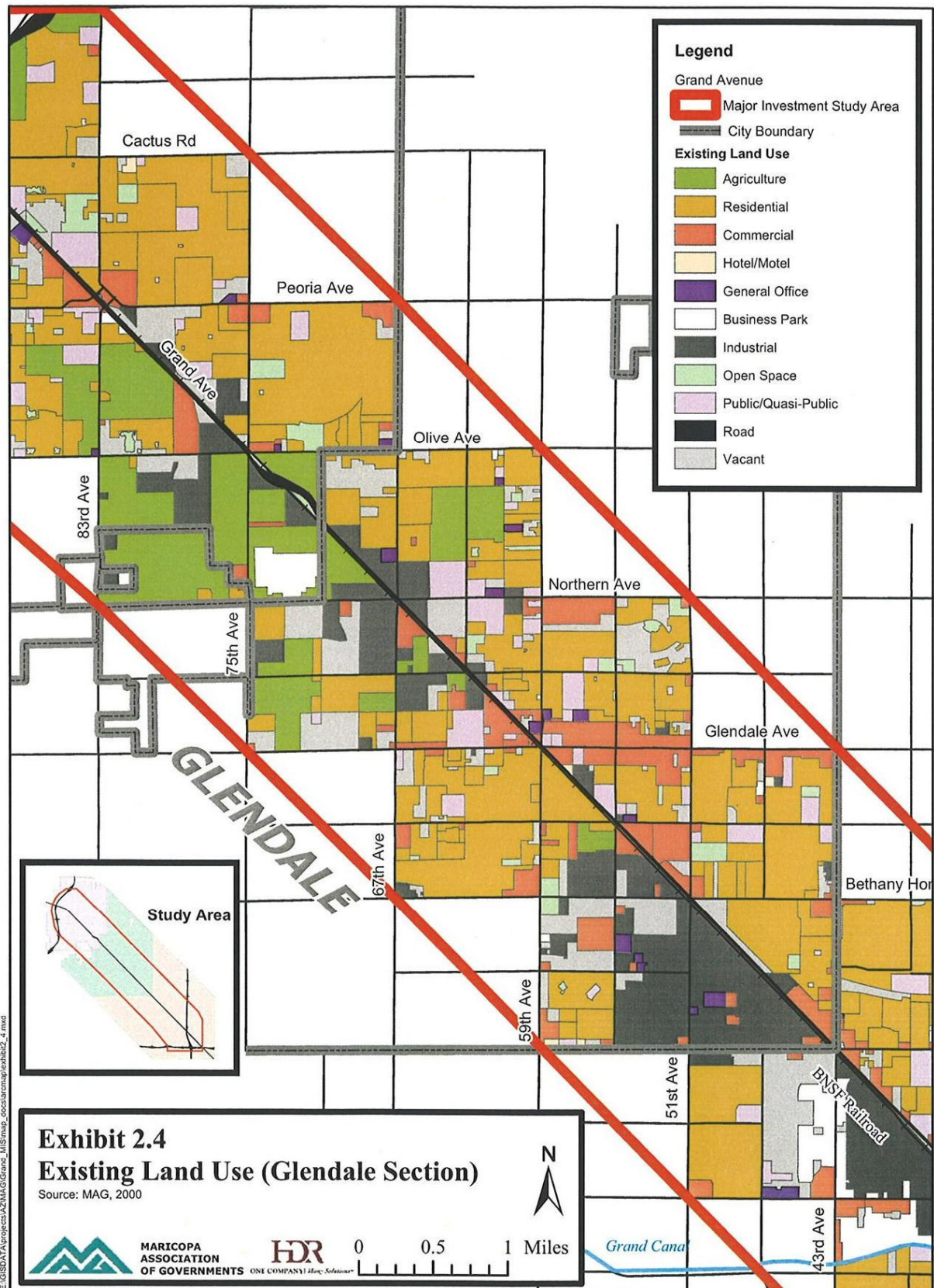
Sources: Maricopa Association of Government's Existing Land Use (Year 2000), HDR.

## Exhibit 2.3 Existing Land Use (Peoria Section)



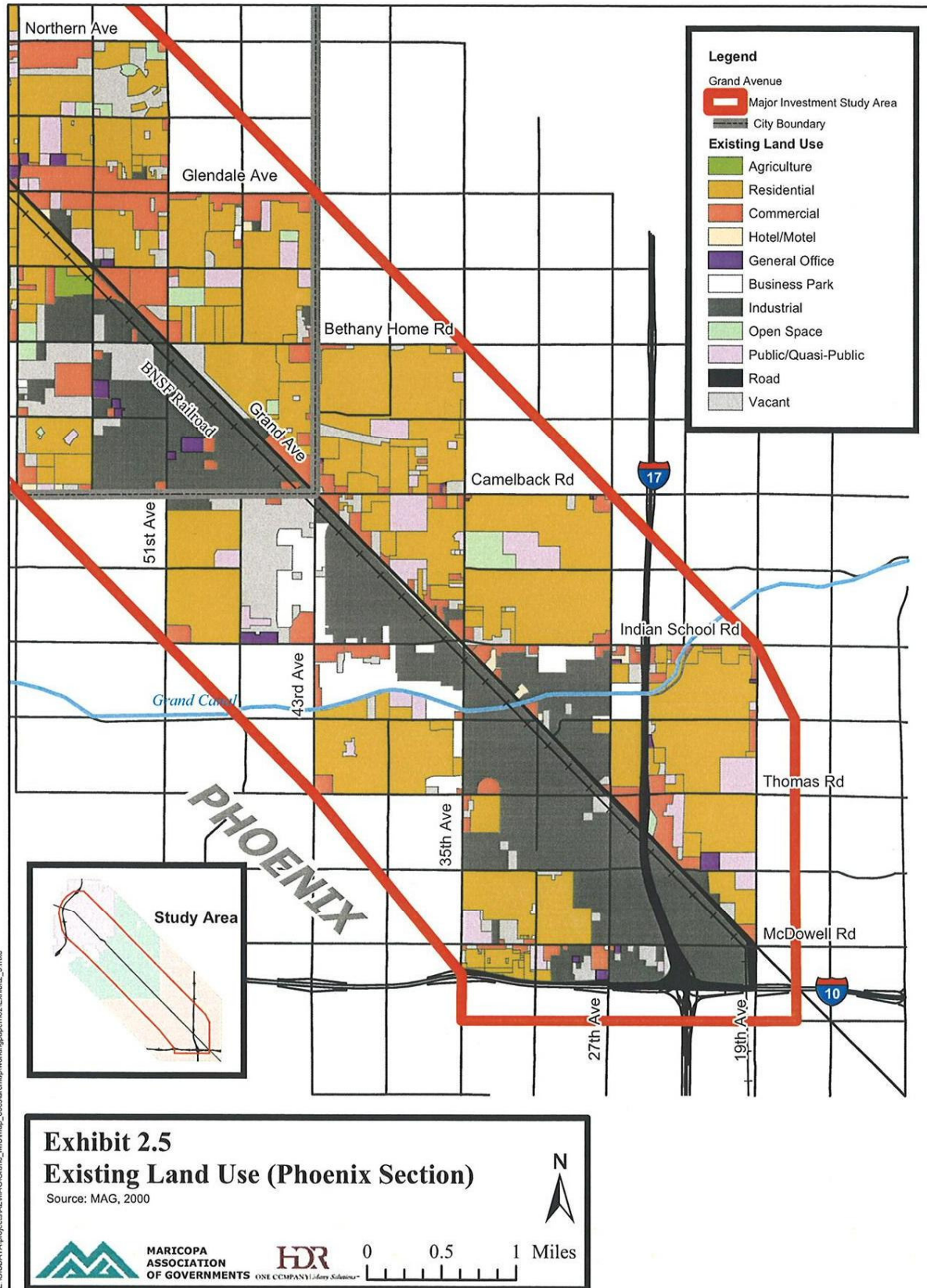


## Exhibit 2.4 Existing Land Use (Glendale Section)





## Exhibit 2.5 Existing Land Use (Phoenix Section)



### 2.3 Future Land Use

Future land uses are from MAG's Future Land Use coverage. This coverage is comprised of currently existing land use with the vacant and build-able agricultural lands replaced with the jurisdiction plans (either the general plan or development plans, if available). Future land uses were analyzed for an area approximately one mile to each side of Grand Avenue. For this study, the MAG data was further consolidated into eight land use categories. The future land use for the study area is summarized in Exhibit 2.6. Future land uses are illustrated in Exhibit 2.7.

The study area encompasses about 17,180 acres of land. Within the study area the cities of Peoria, Glendale, and Phoenix combined have designated 52 percent of the land to residential land uses. Residential land use in Peoria represents 59 percent of the planned land use in the study area, followed by Glendale with 52 percent, and Phoenix with 47 percent. The next largest planned land use in the study area is industrial with 28 percent of the land designated for this use. Phoenix has designated the greatest percentage of study area land to industrial with 38 percent, followed by Glendale with 27 percent, and Peoria with 18 percent. Mixed-use represents five percent of the study area land use. Peoria contains the greatest percentage of mixed-use in the study area with ten percent, while both Glendale and Phoenix have four percent each designated to the mixed-use category. The remaining planned study area land uses are commercial with eight percent, other employment land uses comprising four percent and open space with two percent.

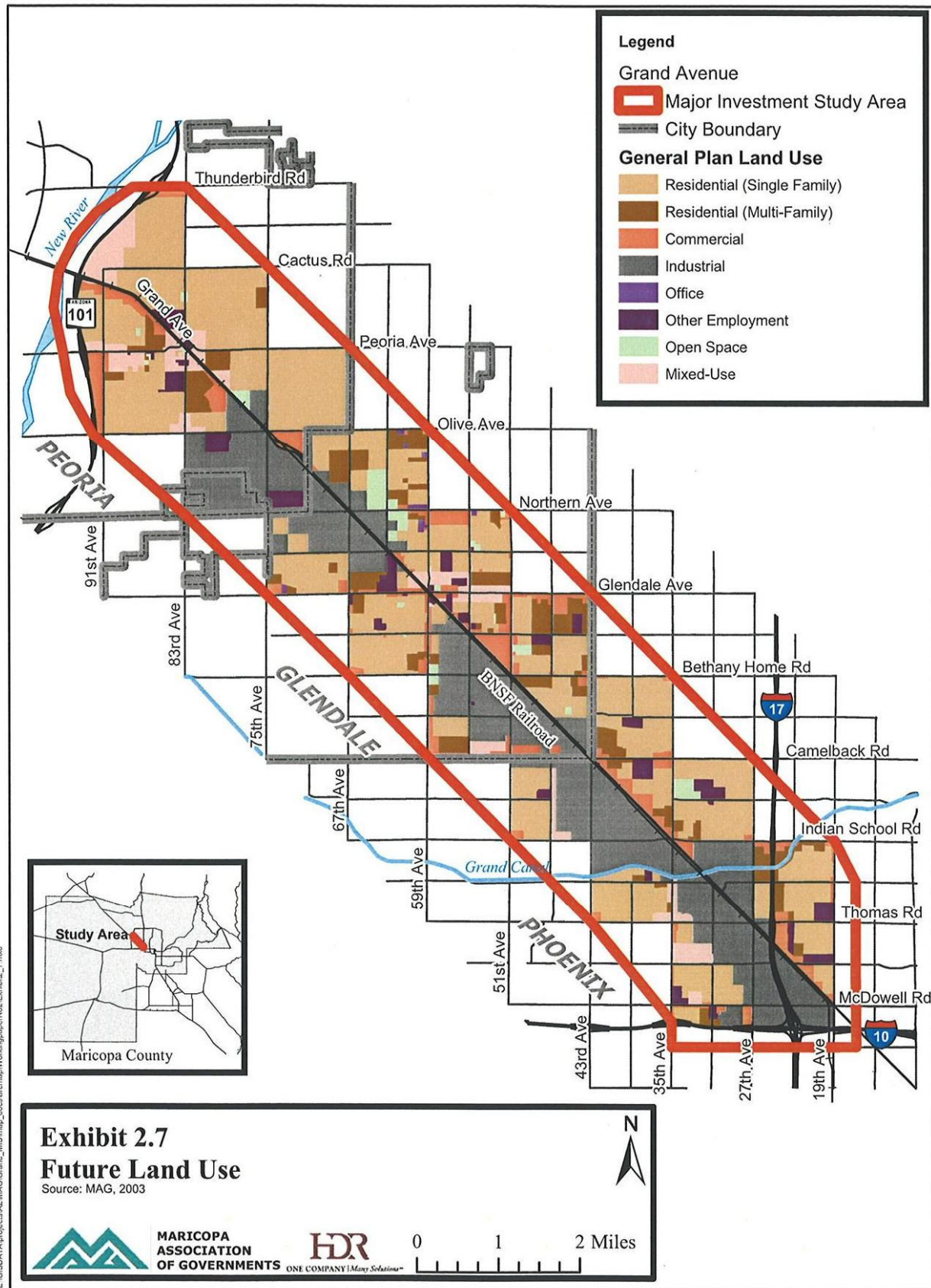
<b>Exhibit 2.6 Future Land Use Summary</b>								
<b>Land Use</b>	<b>Peoria</b>	<b>%</b>	<b>Glendale</b>	<b>%</b>	<b>Phoenix</b>	<b>%</b>	<b>Total</b>	<b>%</b>
Residential -- Multi-Family	238.8	5%	764.4	13%	355.0	6%	1,358.2	8%
Residential --Single Family	2,740.6	54%	2,356.9	39%	2,504.8	41%	7,602.3	44%
<i>Subtotal Residential</i>	<i>2,979.5</i>	<i>59%</i>	<i>3,121.3</i>	<i>52%</i>	<i>2,859.7</i>	<i>47%</i>	<i>8,960.5</i>	<i>52%</i>
Commercial	374.6	7%	628.4	10%	424.1	7%	1,427.1	8%
Industrial	916.7	18%	1,650.8	27%	2,285.3	38%	3,936.2	23%
Mixed Use	501.9	10%	208.3	3%	212.0	3%	1,838.8	11%
Office	0	0%	38.8	1%	0	0%	38.8	<1%
Other Employment	240.1	5%	186.2	3%	255.2	4%	681.5	4%
Open Space	52.0	1%	197.3	3%	45.4	1%	294.7	2%
<b>Grand Total</b>	<b>5,064.7</b>	<b>100%</b>	<b>6,031.1</b>	<b>100%</b>	<b>6,081.8</b>	<b>100%</b>	<b>17,177.6</b>	<b>100%</b>

Source: Maricopa Association of Governments Future Land Use (2003).

Future land uses for the affected communities reveal several changes from the existing land use pattern in the study area:

- Agricultural land is projected to be converted to residential/non-residential uses.
- The amount of single-family and multi-family residential is anticipated to increase.
- Industrial land use is anticipated to increase in Peoria, Glendale and Phoenix.

## Exhibit 2.7 Future Land Use



### **Existing and Projected Population**

The population numbers used in this report are based on MAG's Interim Socioeconomic Projections (July 2003). These projections use a July 1, 2000 base population, derived from the 2000 US Census. The interim projections have been prepared for July 1 of the following years: 2010, 2020, 2025 and 2030. The 2006 base year projections are derived from a linear interpolation of the interim projections. Numbers reported for municipalities are based on Municipal Planning Areas (MPAs) which include the corporate limits of a municipality and adjacent areas anticipated to become part of those corporate limits in the future.

The unit of analysis for the population projections is the Socioeconomic Analysis Zones (SAZ). The study area is comprised of 39 SAZs. The SAZs are shown in Exhibit 2.8. The existing and projected population by SAZ for the study area is shown in Exhibit 2.9. Existing population densities for the study area are shown in Exhibit 2.10.

The 2006 projected Maricopa County population is 3,719,300. By 2030, the Maricopa County population is projected to be nearly 6,140,000. During the same period Peoria's population is projected to increase nearly 80 percent, followed by Phoenix with 40 percent growth, and then Glendale which is anticipated to experience 17 percent growth.

The 2006 population projection for the study area is 147,832 people. The study area is projected to have a compounded annual growth rate of approximately 1.2 percent between 2000 and 2006. During this same period the Peoria, Glendale, and Phoenix MPAs are all projected to have greater compounded annual growth rates of 6.0 percent, 3.5 percent, and 2.8 percent, respectively.

The study area is expected to grow seven percent in population to 158,464 people by the year 2030. Within the study area, absolute population growth will be greatest in Glendale with an additional 5,502 people (nine percent increase), followed by Peoria with an additional 2,593 people (seven percent increase), and Phoenix with an additional 2,537 people (five percent increase).

The study area population density is approximately 8.6 people per acre (refer to Exhibit 2.9). The Peoria portion of the study had a density of 7.2 people per acre, Glendale's population density is 9.8 people per acre, and Phoenix's portion of the study area has 8.6 people per acre. These densities are higher than the overall population densities for Peoria, Glendale, and Phoenix MPAs (1.1, 4.5, and 3.7 people per acre, respectively).

The projected increase in population for the study area will result in the population density increasing by approximately seven percent. The study area population density increase is less than the projected population density increase for each of the constituent cities.



**Exhibit 2.8 Socioeconomic Analysis Zones (SAZ) Within Study Area**

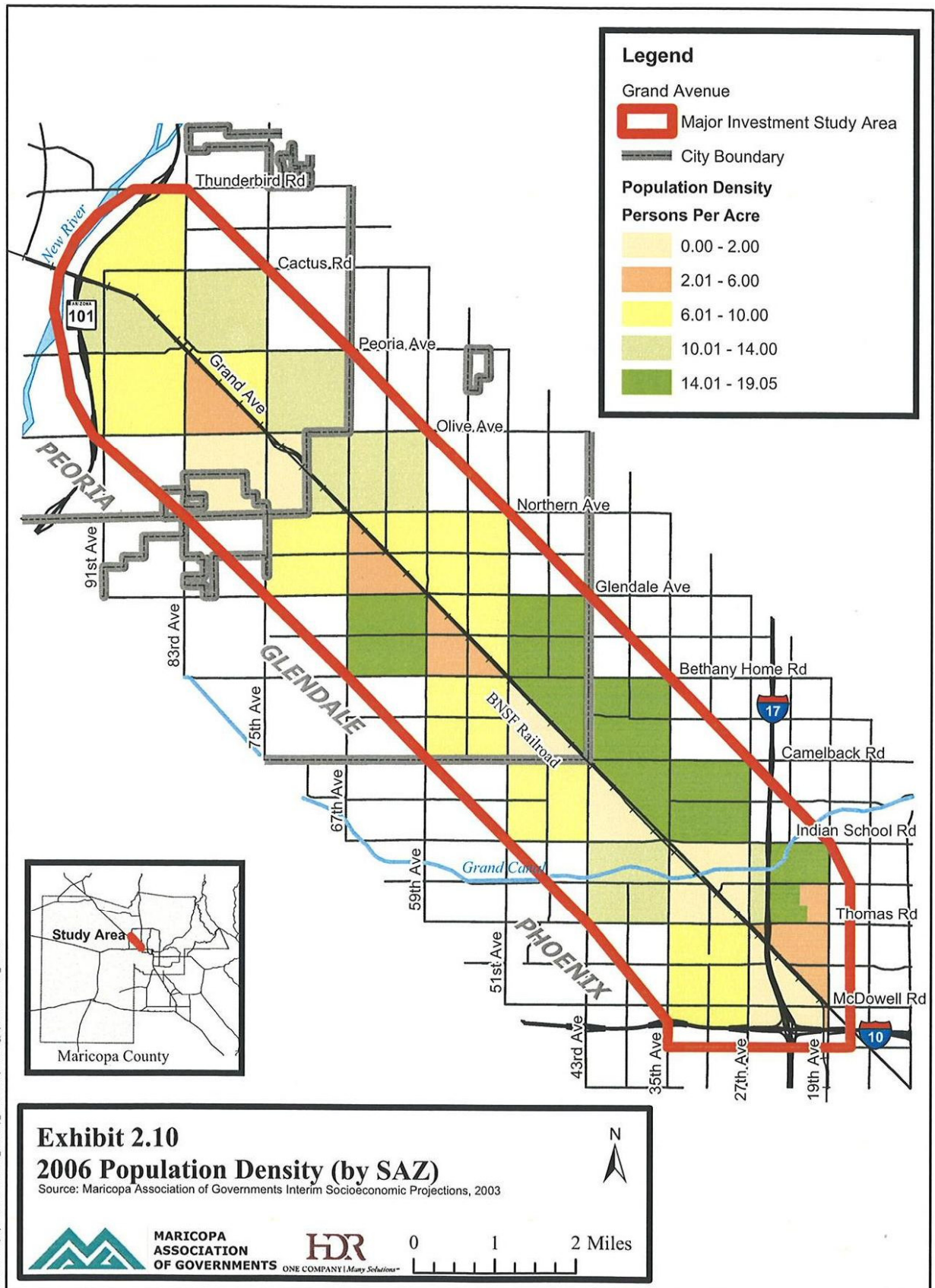


<b>Exhibit 2.9</b>							
<b>Base Year and Projected Population</b>							
		<b>2006</b>		<b>2030</b>			
<b>SAZ</b>	<b>Acres</b>	<b>Resident Population</b>	<b>Population Density</b>	<b>Resident Population</b>	<b>Population Density</b>	<b>Absolute Change</b>	<b>Percent Change</b>
<b>Peoria</b>							
347	920.0	6,224	6.77	6,579	7.15	355	6%
348	494.9	5,418	10.95	5,877	11.87	459	8%
352	636.9	7,070	11.10	7,262	11.4	192	3%
360	766.9	5,960	7.77	6,082	7.93	122	2%
362	318.0	2,544	8.00	3,004	9.45	460	18%
363	325.1	1,782	5.48	2,571	7.91	789	44%
364	642.1	119	0.19	120	0.19	1	1%
365	642.8	7,433	11.56	7,648	11.9	215	3%
366	318.7	31	0.10	31	0.1	0	0%
<i>Peoria Subtotal</i>	5,065.5	36,581	7.22	39,174	7.73	2,593	7%
<b>Glendale</b>							
433	639.4	4,090	6.40	5,323	8.32	1,233	30%
436	320.4	3,522	10.99	3,926	12.25	404	11%
438	611.0	8,128	13.30	9,678	15.84	1,550	19%
439	309.5	1,947	6.29	1,994	6.44	47	2%
440	311.1	1,728	5.55	1,837	5.91	109	6%
441	621.5	11,834	19.04	12,329	19.84	495	4%
445	649.7	5,302	8.16	6,056	9.32	754	14%
446	323.4	2,179	6.74	2,218	6.86	39	2%
447	326.3	1,320	4.05	1,345	4.12	25	2%
448	650.0	4,274	6.58	4,510	6.94	236	6%
452	633.9	9,858	15.55	10,156	16.02	298	3%
453	319.9	4,694	14.67	5,006	15.65	312	7%
454	314.9	2	0.01	2	0.01	0	0%
<i>Glendale Subtotal</i>	6,031.1	58,878	9.76	64,380	10.67	5,502	9%
<b>Phoenix</b>							
660	639.0	10038	15.71	10,292	16.11	254	3%
661	339.9	4790	14.09	5,379	15.83	589	12%
665	636.2	9252	14.54	9,562	15.03	310	3%
666	336.5	354	1.05	507	1.51	153	43%
671	143.8	1448	10.07	1,729	12.02	281	19%
739	636.4	4707	7.40	4,754	7.47	47	1%
743	302.2	10	0.03	11	0.04	1	10%
744	639.5	7592	11.87	7,780	12.17	188	2%
747	301.2	175	0.58	210	0.7	35	20%
748	794.5	5199	6.54	5,342	6.72	143	3%
750	242.2	0	0.00	0	0	0	0%
752	146.4	2259	15.43	2,395	16.36	136	6%
753	350.2	1885	5.38	1,972	5.63	87	5%
826	236.4	2	0.01	2	0.01	0	0%
1833	97.6	1510	15.47	1,583	16.22	73	5%
1835	102.6	579	5.64	598	5.83	19	3%
1836	137.3	2573	18.74	2,794	20.35	221	9%
<i>Phoenix Subtotal</i>	6,081.8	52,373	8.61	54,910	9.03	2,537	5%
<b>Total Study Area</b>	17,178.4	147,832	8.61	158,464	9.22	10,632	7%
<b>Peoria MPA</b>	130,242	142,100	1.09	253,395	1.95	111,295	78%
<b>Glendale MPA</b>	58,810	266,400	4.53	312,182	5.31	45,782	17%
<b>Phoenix MPA</b>	423,341	1,560,400	3.69	2,187,506	5.17	627,106	40%
<b>Maricopa County</b>	5,902,937	3,719,300	0.63	6,139,971	1.04	2,420,671	65%

Source: Maricopa Association of Governments Interim Socioeconomic Projections (July 2003)



**Exhibit 2.10 2006 Population Density**



## **Employment**

Employment is an important factor in considering travel behavior in the study area. Existing and projected employment were obtained from the MAG Interim Socioeconomic Projections (July 2003). As with the population projections, the 2006 base year employment projections are derived from a linear interpolation of the interim projections. The existing and projected employment for the study area is summarized in Exhibit 2.11. Employment densities are illustrated in Exhibit 2.12.

For the period 2006 to 2030, job growth in Maricopa County is anticipated to increase at a greater rate than the population. Employment numbers for the County are anticipated to grow from 1,893,100 in the year 2006 to 3,377,000 in the year 2030. This increase in County-wide jobs increases the employment ratio of jobs to population from 0.51 to 0.55.

In the year 2006, there are projected to be 71,097 jobs in the study area. The Phoenix portion of the study area contained 35,120 jobs (49 percent); the Glendale portion of the study area contributed 22,361 jobs (31 percent); and Peoria's portion of the study area contributed the remaining 13,616 jobs (19 percent).

Employment within the study area is expected to grow to 98,003 jobs by the year 2030. Employment density within the study area is expected to increase from the year 2006 density of 4.1 to the year 2030 density of 5.7. The Peoria portion of the study area is anticipated to experience the greatest absolute increase in employment with 12,045 new jobs; Glendale is second with 9,151 new jobs; followed by Phoenix with an increase of 5,710 new jobs.

Within the study area, Peoria is anticipated to experience the greatest employment density increase of the three cities, from the year 2006 density of 2.7 employees per acre to a year 2030 density of 5.1 employees per acre; Glendale is next with an increase from 3.7 employees per acre to 5.2; followed by Phoenix with an increase from the year 2000 employment density of 5.8 to a year 2030 estimated employment density of 6.7 employees per acre (densities are based on gross acreage).

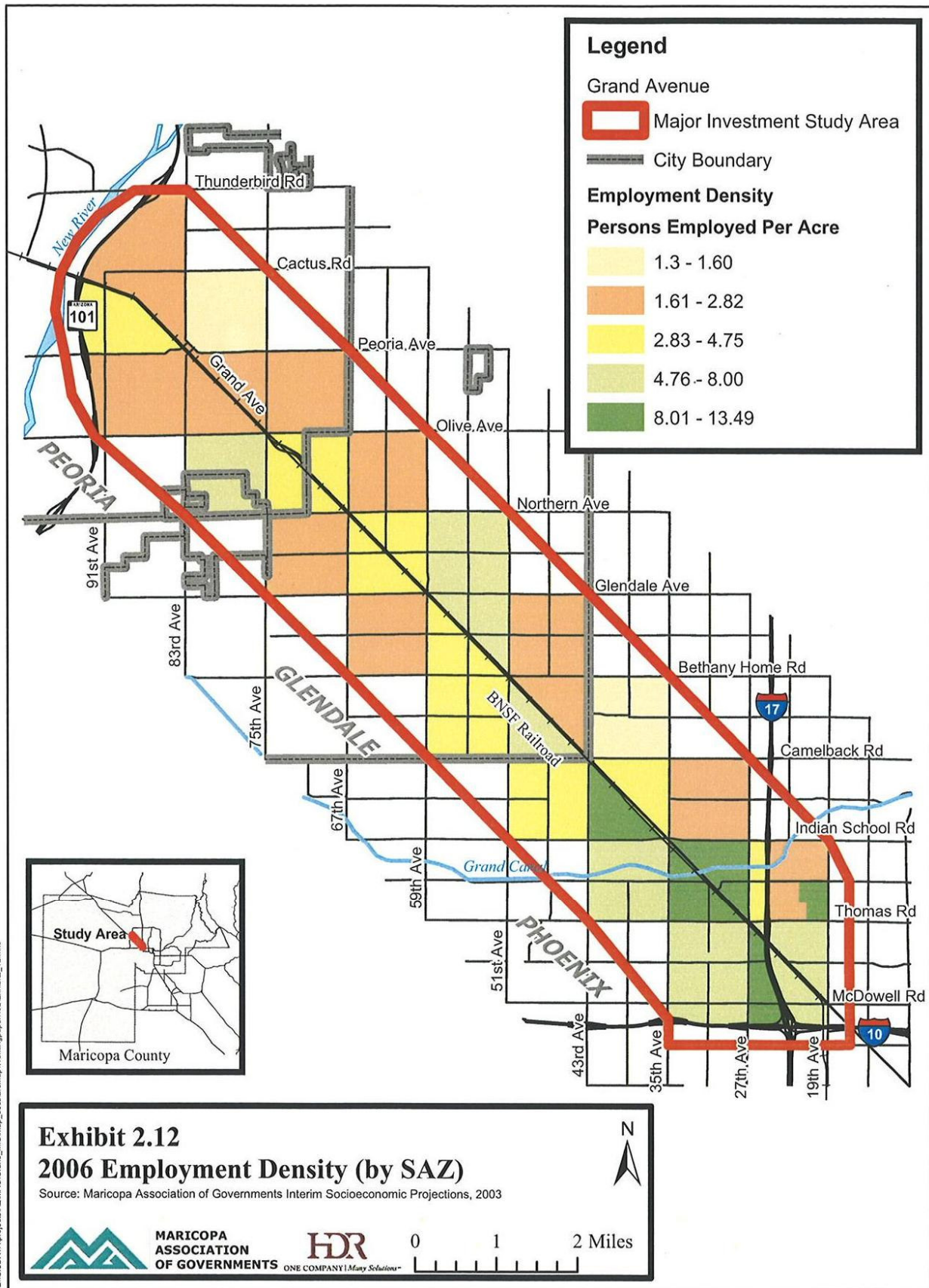
Several conclusions may be drawn from the analysis of employment in the study area:

- The Phoenix portion of the study area contains nearly one-half of the study area employment.
- Although Peoria contributes only 19 percent to the study area employment, these jobs represent 32 percent of Peoria's overall employment.

Exhibit 2.11 Base Year and Projected Employment							
		2006		2030			
SAZ	Acres	Employment	Employment Density	Employment	Employment Density	Absolute Change	Percent Change
<b>Peoria</b>							
347	920.0	1,842	2.00	4,474	4.86	2,632	143%
348	494.9	1,838	3.71	2,337	4.72	499	27%
352	636.9	835	1.31	829	1.30	-6	-1%
360	766.9	1,967	2.56	2,705	3.53	738	38%
362	318.0	662	2.08	868	2.73	206	31%
363	325.1	628	1.93	1,159	3.56	531	85%
364	642.1	3,511	5.47	9,424	14.68	5,913	168%
365	642.8	1,151	1.79	1,148	1.79	-3	0%
366	318.7	1,182	3.71	2,717	8.53	1,535	130%
<i>Peoria Subtotal</i>	<i>5,065.5</i>	<i>13,616</i>	<i>2.69</i>	<i>25,661</i>	<i>5.07</i>	<i>12,045</i>	<i>88%</i>
<b>Glendale</b>							
433	639.4	1,410	2.21	3,784	5.92	2,374	168%
436	320.4	953	2.97	1,959	6.11	1,006	106%
438	611.0	1,630	2.67	1,768	2.89	138	8%
439	309.5	1,287	4.16	2,417	7.81	1,130	88%
440	311.1	1,426	4.58	2,138	6.87	712	50%
441	621.5	1,368	2.20	1,470	2.37	102	7%
445	649.7	3,190	4.91	3,194	4.92	4	0%
446	323.4	2,311	7.15	2,373	7.34	62	3%
447	326.3	1,444	4.42	2,207	6.76	763	53%
448	650.0	2,982	4.59	5,787	8.90	2,805	94%
452	633.9	1,652	2.61	1,718	2.71	66	4%
453	319.9	618	1.93	607	1.90	-11	-2%
454	314.9	2,090	6.64	2,090	6.64	0	0%
<i>Glendale Subtotal</i>	<i>6,031.1</i>	<i>22,361</i>	<i>3.71</i>	<i>31,512</i>	<i>5.22</i>	<i>9,151</i>	<i>41%</i>
<b>Phoenix</b>							
660	639.0	804	1.26	812	1.27	8	1%
661	339.9	1496	4.40	1,605	4.72	109	7%
665	636.2	1147	1.80	1,156	1.82	9	1%
666	336.5	3222	9.58	3,495	10.39	273	8%
671	143.8	660	4.59	684	4.76	24	4%
739	636.4	1842	2.89	5,651	8.88	3,809	207%
743	302.2	3321	10.99	3,370	11.15	49	1%
744	639.5	4140	6.47	4,346	6.80	206	5%
747	301.2	4061	13.48	4,061	13.48	0	0%
748	794.5	6126	7.71	7,013	8.83	887	14%
750	242.2	2505	10.34	2,816	11.63	311	12%
752	146.4	280	1.91	283	1.93	3	1%
753	350.2	2105	6.01	2,121	6.06	16	1%
826	236.4	1891	8.00	1,891	8.00	0	0%
1833	97.6	221	2.26	221	2.26	0	0%
1835	102.6	956	9.32	956	9.32	0	0%
1836	137.3	343	2.50	349	2.54	6	2%
<i>Phoenix Subtotal</i>	<i>6,081.8</i>	<i>35,120</i>	<i>5.77</i>	<i>40,830</i>	<i>6.71</i>	<i>5,710</i>	<i>16%</i>
<b>Total Study Area</b>	<b>17,178.4</b>	<b>71,097</b>	<b>4.14</b>	<b>98,003</b>	<b>5.71</b>	<b>26,906</b>	<b>38%</b>
<b>Peoria MPA</b>	58,810	112,100	1.91	190,225	3.23	78,125	70%
<b>Glendale MPA</b>	130,242	42,100	0.32	141,492	1.09	99,392	236%
<b>Phoenix MPA</b>	423,341	836,500	1.98	1,264,062	2.99	427,562	51%
<b>Maricopa County</b>	5,902,937	1,893,100	0.32	3,377,000	0.57	1,483,900	78%

Source: Maricopa Association of Governments Interim Socioeconomic Projections (July 2003)

**Exhibit 2.12 2006 Employment Density**





## **Title VI Environmental Justice**

### **Introduction**

Environmental justice is a planning consideration based on Title VI of the 1964 Civil Rights Act and Executive Order 12898 of 1994 titled *Federal Actions to Address Environmental Justice in Minority and Low-Income Populations*. It is MAG's intent to recognize the significance of transportation planning in the continued quality of life of all residents of the Metropolitan Area.

Title VI of the 1964 Civil Rights Act and related statutes require that individuals not be excluded from participating in, denied the benefit of, or subject to discrimination under any program or activity receiving federal funding on the basis of race, color, national origin, age, sex, or disability. Executive Order 12898 further directs federal programs, policies and activities not have a disproportionately high and adverse human health and environmental effect on low-income populations.

These documents provide guidance on environmental justice populations but stop short of prescribing the specific methods and processes for ensuring environmental justice in decision making. The following sections will identify the environmental justice populations within the Grand Avenue study area. This understanding will provide the basis for identifying socioeconomic concerns of the area and addressing them through the proposed actions.

The intent of environmental justice is to ensure that minority and low-income communities (and others specified below) are included in the transportation planning process, and to ensure that these populations benefit equally from the transportation network without shouldering a disproportionate share of its burdens.

Environmental justice principles that relate to the development of the Grand Avenue MIS include: ensuring the full and fair participation by potentially all affected communities in the transportation decision making process, including those of low-income or minority populations; prevent the denial of, reduction in, or significant delay in the receipt of benefits by low income and minority populations; avoid, minimize or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects, on minority and low-income populations.

### **Defining Environmental Justice Communities**

The 2000 U.S. Census is the source of data used for determining the environmental justice populations. The 2000 Census data reflects information current as of April 1, 2000 (population data reported in this section may differ from the data presented Section 2.4, Existing and Projected Population, due to the fact that the data used in that section is derived from the Census data which has a April 1, 2000 base and may contain different geography). The unit of analysis is the Census Tract. In all instances the defined group was compared to the Maricopa County mean. *Environmental justice populations are*

*those Tracts where the identified group represents a percentage of the population greater than that of the County mean.*

Environmental justice populations include the specific groups called out by the Federal Highway Administration's "Actions to Address Environmental Justice in Minority Populations and Low-Income Populations" memorandum dated December 2, 1998, and Presidential Executive Order 12898. In addition to the groups identified in the above referenced documents, information on educational attainment and the availability of vehicles at households was also included in this analysis. A lack of educational attainment may be a hindrance for these residents to become involved in the process. The availability of vehicles, or lack thereof, would indicate a greater need for alternative modes.

### Minority Populations

For this study the minority populations include the following groups (as defined in the 2000 US Census): Black or African American alone not Hispanic or Latino, American Indian and Alaska Native alone not Hispanic or Latino, Asian alone not Hispanic or Latino, Native Hawaiian and Other Pacific Islander alone not Hispanic or Latino, some other race alone not Hispanic or Latino, persons two more races not Hispanic or Latino, and Hispanic or Latino.

As of the year 2000, minorities represented 33.8 percent of the Maricopa County population. The largest component of the minority population is "Hispanic" or "Latino" classification, which comprise approximately three-quarters of the minority population in the County. "Hispanics" or "Latinos" may be of any race and classify themselves in one of the specific Hispanic or Latino categories -- "Mexican," "Puerto Rican," or "Cuban" -- as well as those who indicate that they are "other Spanish, Hispanic, or Latino." Origin can be viewed as the heritage, nationality group, lineage, or country of birth of the person or the person's parents or ancestors before their arrival in the United States. Exhibit 2.13 summarizes the population of those individuals, within the study area, who are minority. The exhibit also shows comparison populations for Maricopa County and the cities of Peoria, Glendale, and Phoenix. Exhibit 2.14 graphically depicts the percentage of population within the study area by Census Tract that is minority.

The percent reported minority population for the study area is 56.7 percent. The percent minority populations for the study area portions of the cities Glendale, Peoria and Phoenix were 58.2 percent, 34.1 percent and 72.2 percent, respectively. For all three cities, the percent minority population in the study area portion of each city is greater than that for the respective city as a whole.



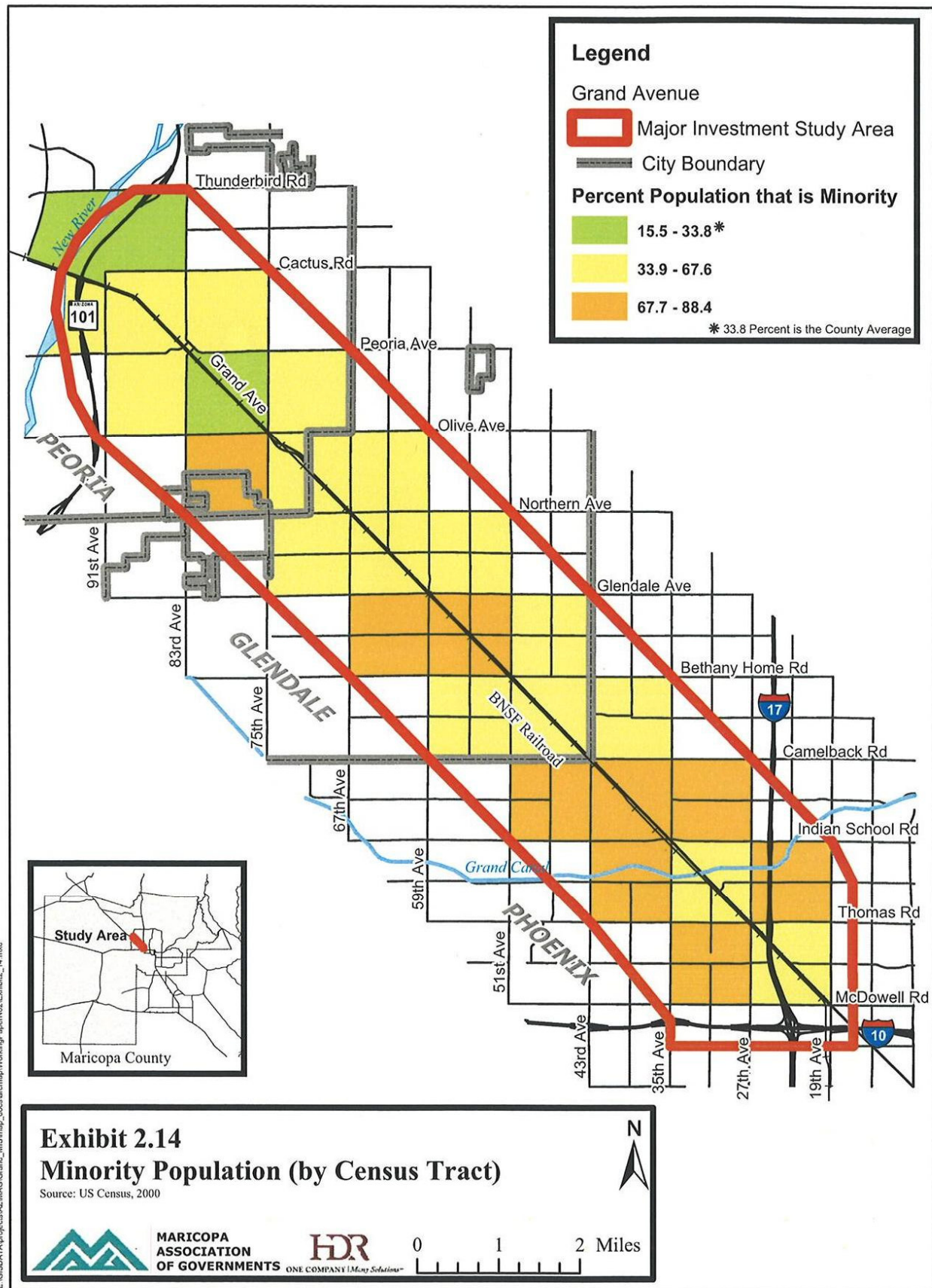
**Exhibit 2.13**  
**Minority Populations Summary**

	Tract	Total Population	White	Black/ African American	American Indian/ Alaska Native	Asian/Pacific Islander	Other Race	Hispanic or Latino	Total Minority Population	Percent Minority
<b>Peoria</b>	071507	5,482	4,634	160	17	93	60	518	848	15.5%
	071906	5,204	3,149	172	29	145	128	1,581	2,055	39.5%
	071904	7,275	4,688	243	71	81	110	2,082	2,587	35.6%
	071908	6,964	4,514	342	89	122	116	1,781	2,450	35.2%
	071910	6,878	4,225	277	69	88	159	2,060	2,653	38.6%
	071911	2,526	1,715	75	22	64	55	595	811	32.1%
	092704	120	20	0	0	0	1	99	100	83.3%
	092310	3,084	1,799	245	85	48	111	796	1,285	41.7%
Subtotal		37,533	24,744	1,514	382	641	740	9,512	12,789	34.1%
<b>Glendale</b>	092705	2,471	913	139	52	53	59	1,255	1,558	63.1%
	092304	7,399	4,830	377	167	198	181	1,646	2,569	34.7%
	092600	3,608	1,547	129	43	21	38	1,830	2,061	57.1%
	092800	11,269	2,865	662	184	43	257	7,258	8,404	74.6%
	092500	4,258	1,725	91	47	126	59	2,210	2,533	59.5%
	092900	3,464	554	147	31	21	53	2,658	2,910	84.0%
	093104	3,885	1,732	439	189	45	129	1,351	2,153	55.4%
	093000	9,614	4,756	700	240	120	287	3,511	4,858	50.5%
	093101	4,332	2,124	487	68	99	100	1,454	2,208	51.0%
Subtotal		50,300	21,046	3,171	1,021	726	1,163	23,173	29,254	58.2%
<b>Phoenix</b>	107101	4,214	1,990	262	74	195	93	1,600	2,224	52.8%
	107102	5,289	1,880	534	195	239	144	2,297	3,409	64.5%
	109200	4,724	1,153	278	101	140	99	2,953	3,571	75.6%
	109100	9,085	2,593	290	115	369	214	5,504	6,492	71.5%
	110200	469	170	6	6	0	15	272	299	63.8%
	110300	8,170	2,421	367	276	320	173	4,613	5,749	70.4%
	109300	4,707	1,196	171	49	49	89	3,153	3,511	74.6%
	110100	7,592	1,067	190	109	165	61	6,000	6,525	85.9%
	112100	4,204	488	42	26	20	39	3,589	3,716	88.4%
	112000	1,856	1,053	42	22	12	20	707	803	43.3%
Subtotal		50,310	14,011	2,182	973	1,509	947	30,688	36,299	72.2%
<b>Study Area Total</b>		138,143	59,801	6,867	2,376	2,876	2,850	63,373	78,342	56.7%
Percent		100%	43%	5%	2%	2%	2%	46%	56.7%	
City of Peoria		108,364	84,370	2,887	579	2,103	1,726	16,699	23,994	22.1%
City of Glendale		218,812	141,462	9,818	2,460	6,090	4,639	54,343	77,350	35.3%
City of Phoenix		1,321,045	736,844	63,756	21,472	26,806	22,195	449,972	584,201	44.2%
Maricopa County		3,072,149	2,034,530	108,521	45,703	68,287	51,767	763,341	1,037,619	33.8%

Note: Population totals differ somewhat from that reported in Exhibit 2.9 due to different data sources.

Source: US Census (2000)

**Exhibit 2.14 Minority Population**



### **Aged Populations**

Aged Populations are defined as people 60 years of age and older. Exhibit 2.15 summarizes the study area population of people 60 years of age and older, as well as a number of the other environmental justice factors described below. The exhibit also shows comparison populations for Maricopa County and the cities of Peoria, Glendale, and Phoenix. Exhibit 2.16 illustrates the percentage of population within the study area by Census Tract that are 60 years of age and older. Aged populations are a community of concern because many seniors do not drive or have below average household incomes and rely heavily on transit services. Also, the wide intersections resulting from the diagonal orientation of Grand Avenue make it harder for slower walking pedestrians to cross safely.

Approximately 15 percent of the population of Maricopa County is 60 years of age or older. The percentage of people in the study area 60 years of age and older is 11.6 percent.

### **Poverty**

The poverty status of households is defined as those whose median household income is at or below the Department of Health and Human Services poverty guideline. The poverty thresholds are revised annually to allow for changes in the cost of living. It is important to note that the poverty thresholds are the same for all parts of the country -- they are not adjusted for regional, state or local variations in the cost of living. Exhibit 2.17 graphically depicts the percentage of population within the study area by Census Tract that is considered in poverty.

Low-income households typically have limited car availability and are therefore more transit dependent. Lack of affordable and convenient transportation connections to jobs remains one of the major causes of unemployment and therefore poverty. Public transit can play an important role in the improvement of job accessibility for people from low-income households.

Within Maricopa County, 11.6 percent of the households are considered in poverty. The percent of households within the study area in poverty is 20.1 percent. The poverty level for the study area portions of each of the cities is greater than that of the respective cities. Both the Glendale and Phoenix portions of the study area had percentages of the population in poverty greater than that of the County, with 23.6 percent and 25.8 respectively, while the Peoria portion of the study area had a lower percentage of people in poverty with 7.8 percent.

<b>Exhibit 2.15</b> <b>Environmental Justice Communities</b>						
<b>SAZs</b>	<b>Tract</b>	<b>Total Population</b>	<b>Age 60+ Percent</b>	<b>Mobility Disability Percent</b>	<b>Female Head of Household Percent</b>	<b>Poverty Percent</b>
<b>Peoria</b>						
	071507	5,482	36.4%	18.1%	4.8%	3.0%
	071906	5,204	10.0%	16.3%	12.4%	5.8%
	071904	7,275	8.8%	11.4%	17.5%	8.4%
	071908	6,964	12.0%	14.3%	15.3%	9.0%
	071910	6,878	9.1%	12.7%	11.3%	6.0%
	071911	2,526	5.7%	9.2%	8.7%	5.7%
	092704	120	16.7%	47.5%	0.0%	45.0%
	092310	3,084	6.0%	18.1%	24.2%	19.6%
<i>Peoria Subtotal</i>		<i>37,533</i>	<i>13.2%</i>	<i>14.4%</i>	<i>13.3%</i>	<i>7.8%</i>
<b>Glendale</b>						
	092705	2,471	3.5%	15.7%	18.3%	32.3%
	092304	7,399	18.5%	18.3%	17.2%	12.7%
	092600	3,608	10.0%	9.2%	16.4%	31.9%
	092800	11,269	7.2%	11.8%	16.5%	31.5%
	092500	4,258	19.8%	15.2%	12.1%	22.2%
	092900	3,464	11.8%	13.2%	15.4%	34.1%
	093104	3,885	14.4%	12.2%	28.8%	23.7%
	093000	9,614	12.3%	15.4%	21.7%	18.3%
	093101	4,332	15.7%	12.7%	14.7%	14.6%
<i>Glendale Subtotal</i>		<i>50,300</i>	<i>12.5%</i>	<i>13.9%</i>	<i>18.0%</i>	<i>23.6%</i>
<b>Phoenix</b>						
	107101	4,214	14.1%	12.6%	6.6%	9.1%
	107102	5,289	7.6%	14.0%	15.9%	28.1%
	109200	4,724	6.6%	14.4%	13.9%	27.6%
	109100	9,085	9.7%	11.4%	10.3%	25.6%
	110200	469	11.1%	29.6%	0.0%	43.3%
	110300	8,170	9.9%	15.9%	14.0%	29.7%
	109300	4,707	9.7%	13.6%	10.1%	21.6%
	110100	7,592	6.9%	15.5%	13.5%	28.0%
	112100	4,204	7.0%	18.3%	17.6%	32.9%
	112000	1,856	20.0%	16.8%	7.7%	17.2%
<i>Phoenix Subtotal</i>		<i>50,310</i>	<i>9.3%</i>	<i>14.6%</i>	<i>12.4%</i>	<i>25.8%</i>
<b>Total</b>		<b>138,143</b>	<b>11.6%</b>	<b>14.3%</b>	<b>14.7%</b>	<b>20.1%</b>
<b>City of Peoria</b>		<b>108,364</b>	<b>18%</b>	<b>13.1%</b>	<b>7.6%</b>	<b>5.2%</b>
<b>City of Glendale</b>		<b>218,812</b>	<b>10%</b>	<b>11.9%</b>	<b>10.9%</b>	<b>11.7%</b>
<b>City of Phoenix</b>		<b>1,321,045</b>	<b>11%</b>	<b>12.7%</b>	<b>11.6%</b>	<b>15.5%</b>
<b>Maricopa County</b>		<b>3,072,149</b>	<b>15%</b>	<b>12.1%</b>	<b>9.3%</b>	<b>11.6%</b>

Source: US Census (2000)

**Exhibit 2.16 Age 60 Years and Older**

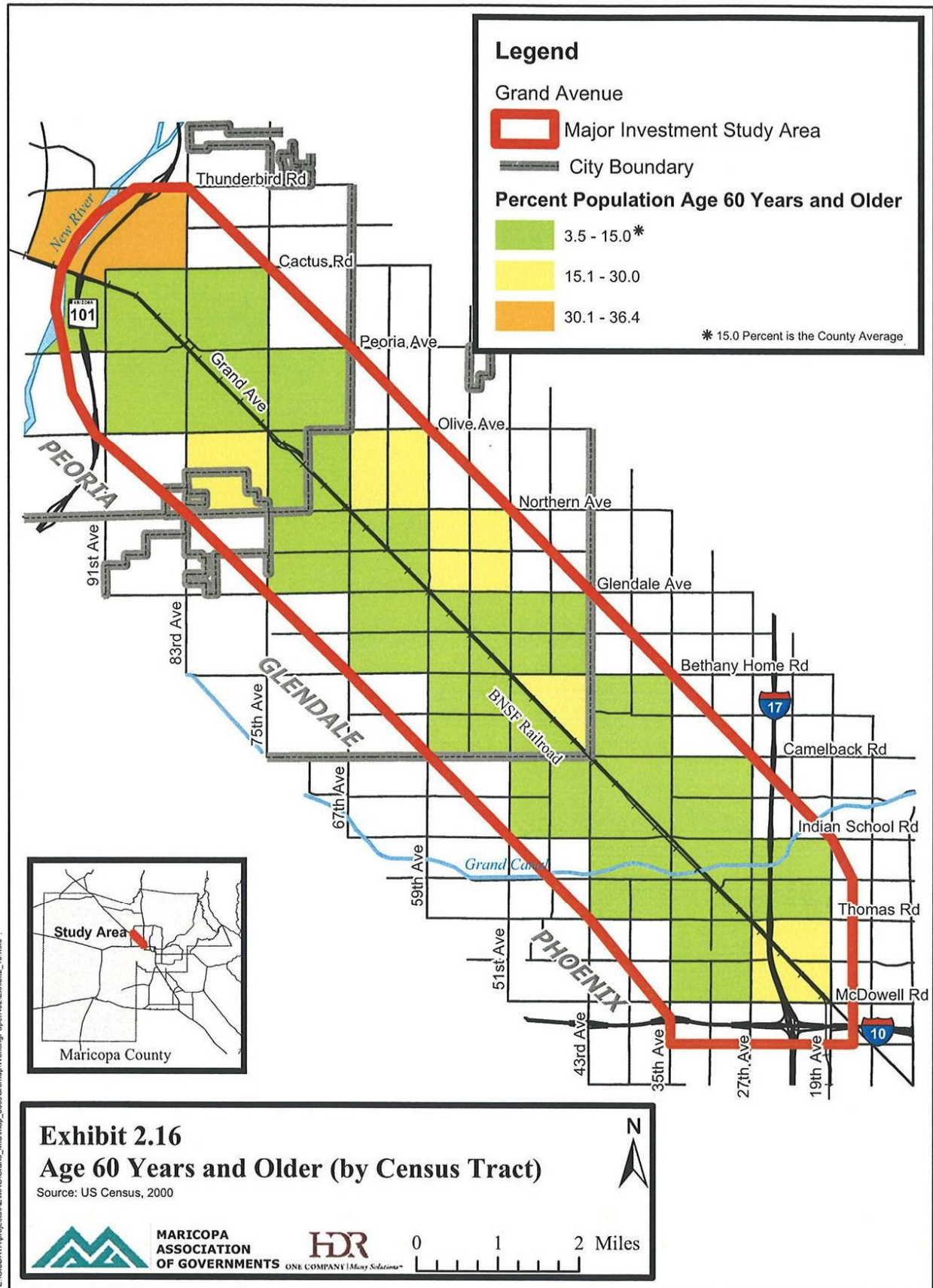
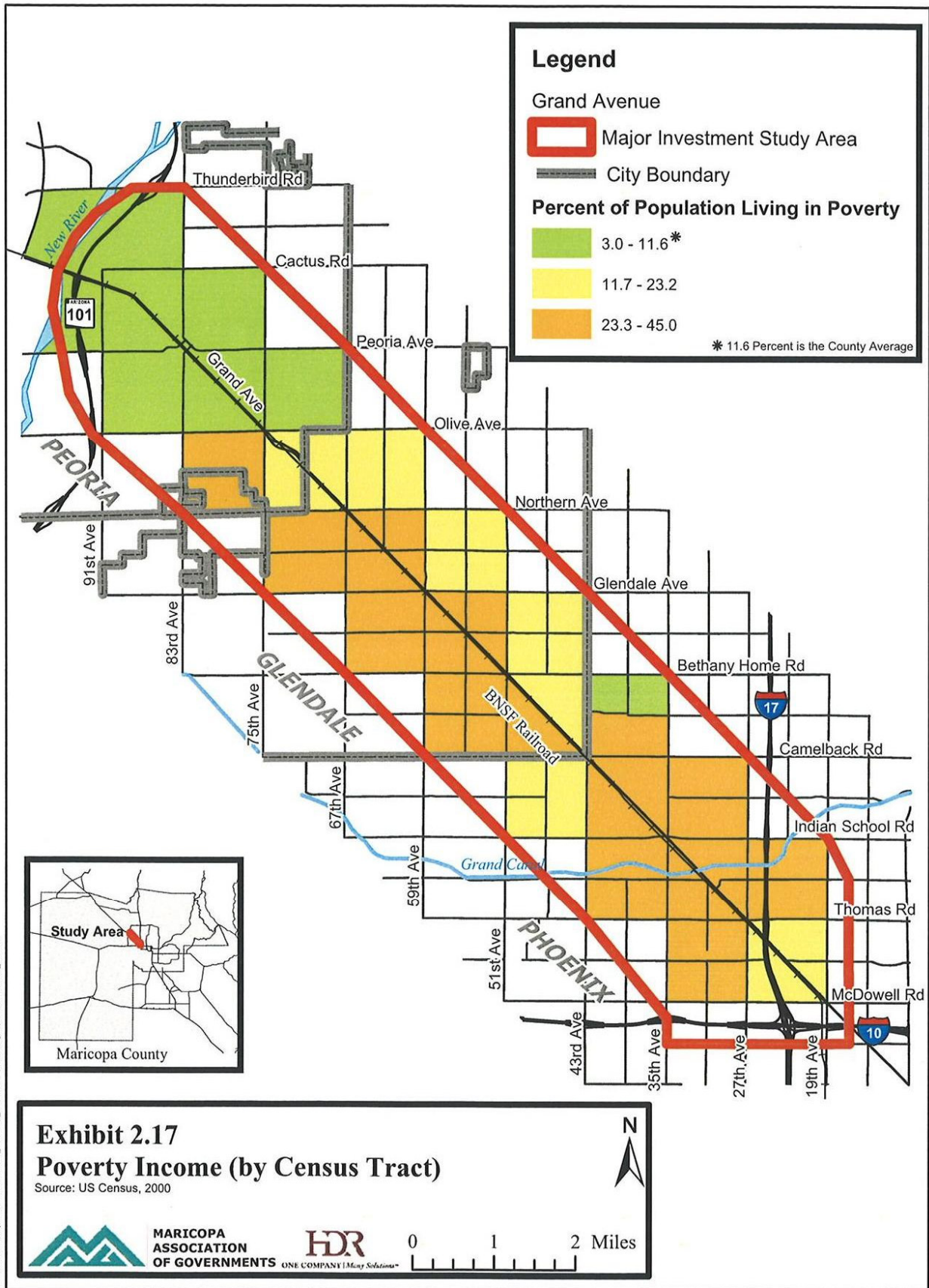




Exhibit 2.17 Poverty Income





### **Mobility Disability**

For this study mobility limitations are derived from the physical and going-outside-of-home categories for those age five and over (information for those under five years of age is not collected). Exhibit 2.18 graphically depicts the percentage of population within the study area by Census Tract that have mobility disabilities as defined above.

Within Maricopa County, the percentage of people reporting disabilities as described above is 12.1 percent. Within the study area, the percentage of people with mobility or outside of home limitations is 14.3 percent. The percent of people with mobility disabilities for the study area portions of the cities Glendale, Peoria and Phoenix were 13.9 percent, 14.4 percent and 14.6 percent, respectively. For all three cities, the percent of people with mobility or going outside of home limitations is greater in the study area portion of each city than for the respective city as a whole.

### **Female Head of Household**

The Female Head of Household category represents those households with a female householder and no husband present with (her) own children less than 18 years of age. Exhibit 2.19 graphically depicts the percentage of households within the study area by Census Tract that are headed by a female with children under 18 years of age.

The study area percentage of female heads of household is 14.7, compared to Maricopa County where female heads of household represent 9.3 percent of the households.

Glendale's portion of the study area contains the highest percentage of female heads of households with 18 percent, followed by Peoria with 13.3 percent, and Phoenix with 12.4 percent.

### **Educational Attainment**

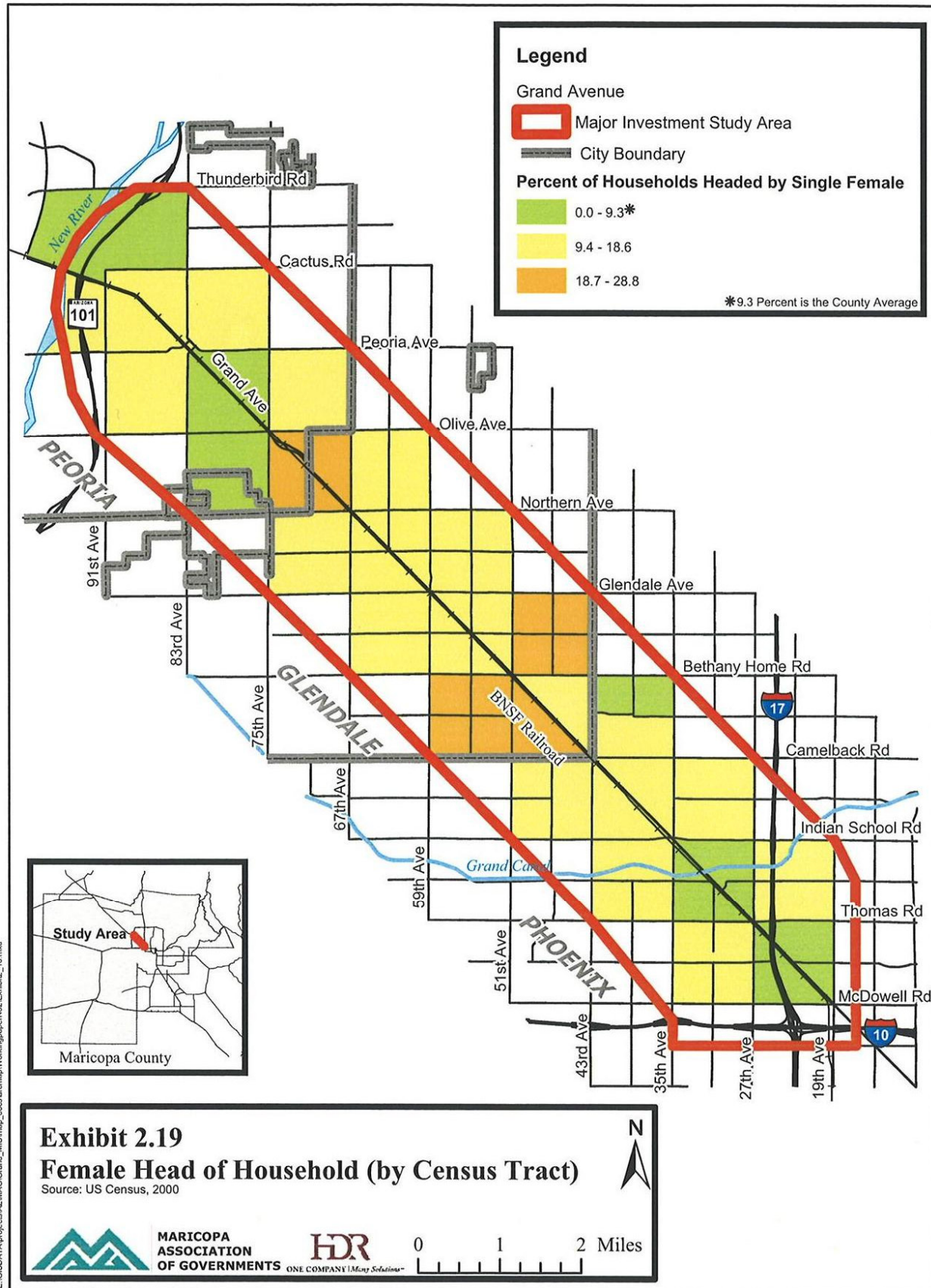
Educational attainment includes the populations of people, over 25 years of age, having attained various levels of education. Three levels were identified for this study, namely: persons without a high school diploma, persons with a high school education, and, persons with higher education. Exhibit 2.20 summarizes the percentage of population over twenty-five years of age within the study area by Census Tract that do not have a high school diploma. Exhibit 2.21 graphically depicts the percent of the population over twenty-five years of age without a high school diploma.

For Maricopa County as a whole, 17.5 percent of the population is without a high school diploma. Within the study area the number without a high school diploma is nearly double the County percentage at 32.1 percent. The Phoenix portion of the study area has the greatest percentage of the population without a high school diploma at 42 percent, followed by Glendale with 34.7 percent. Peoria's percentage of the population without a high school diploma is 17.2 percent, slightly below that of Maricopa County.

## Exhibit 2.18 Mobility Disability



## Exhibit 2.19 Female Head of Household



### Automobile Availability

The 2000 Census reported the number of zero car households. Exhibit 2.22 summarizes the percentage of households that have vehicles available. Exhibit 2.23 graphically depicts the percentage of households where there are no vehicles available.

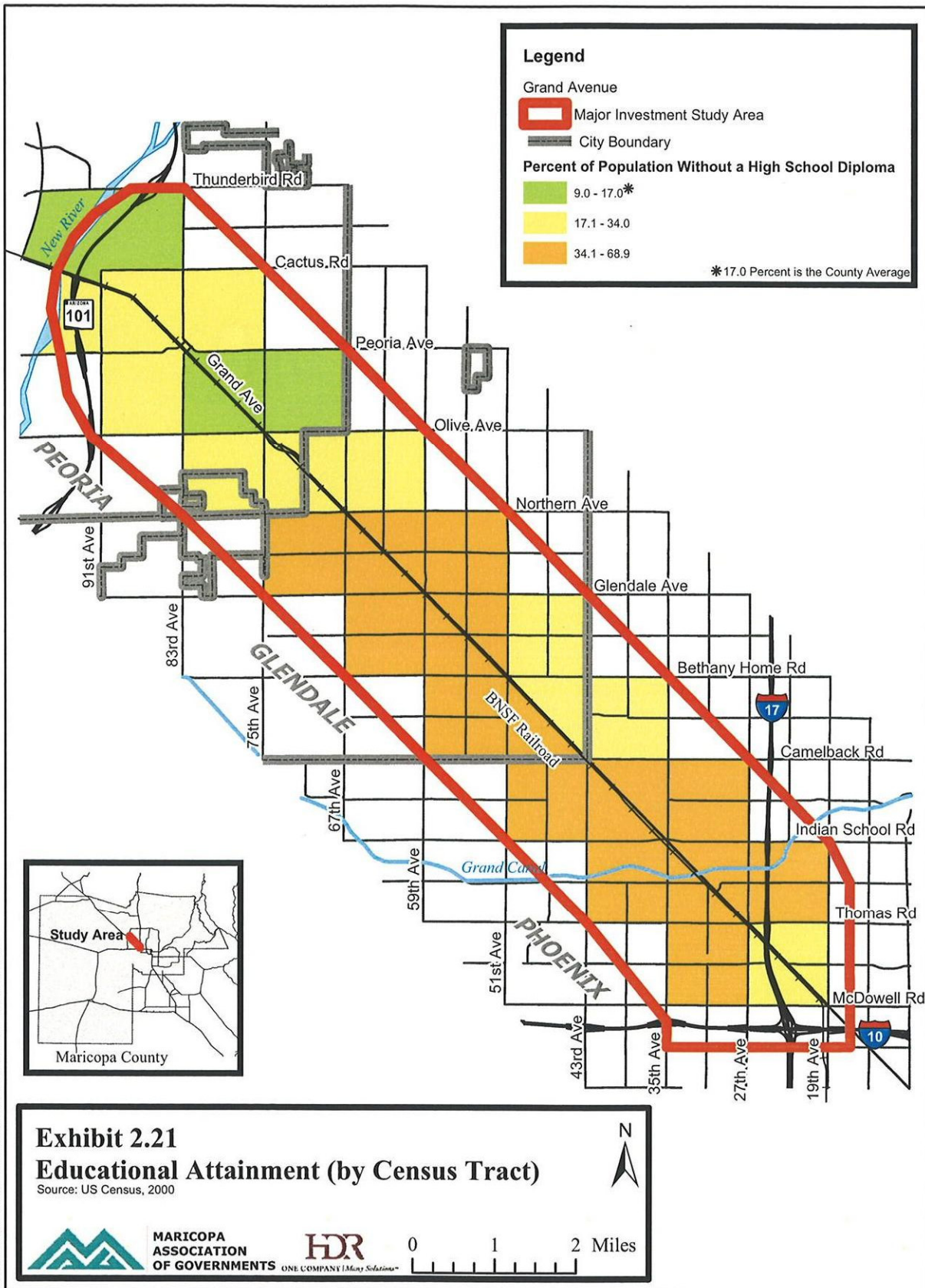
Within the study area the number of zero car households is 12.5 percent. In Maricopa County, zero car households represent seven percent of all households. The Glendale portion of the study area reported 16.2 percent of the households with no vehicle present, followed by Phoenix with 12.5 percent, and Peoria at 7.3 percent. For all three cities, the percent of households without vehicles is greater for the study area portion of each city than for the respective city as a whole.

<b>Exhibit 2.20</b> <b>Educational Attainment Summary</b>								
<b>SAZs</b>	<b>Tract</b>	<b>Population 25 years and over: Total</b>	<b>Persons without a High School Diploma</b>	<b>Percent without a High School Diploma</b>	<b>Persons with High School Education</b>	<b>Percent with High School Education</b>	<b>Persons with Higher Education</b>	<b>Percent with Higher Education</b>
<b>Peoria</b>								
	071507	3,958	355	9%	1,231	31%	2,372	60%
	071906	3,111	640	21%	915	29%	1,556	50%
	071904	4,220	684	16%	1,498	35%	2,038	48%
	071908	4,183	753	18%	1,352	32%	2,078	50%
	071910	3,987	835	21%	1,278	32%	1,874	47%
	071911	1,423	168	12%	403	28%	852	60%
	092704	58	13	22%	15	26%	30	52%
	092310	1,620	422	26%	441	27%	757	47%
<i>Peoria Subtotal</i>		22,560	3,870	17%	7,133	32%	11,557	51%
<b>Glendale</b>								
	092705	1,149	453	39%	271	24%	425	37%
	092304	4,562	957	21%	1,270	28%	2,335	51%
	092600	1,984	692	35%	621	31%	671	34%
	092800	5,543	2,819	51%	1,291	23%	1,433	26%
	092500	2,537	895	35%	751	30%	891	35%
	092900	1,853	911	49%	485	26%	457	25%
	093104	2,201	841	38%	664	30%	696	32%
	093000	5,399	1,533	28%	1,683	31%	2,183	40%
	093101	2,662	582	22%	942	35%	1,138	43%
<i>Glendale Subtotal</i>		27,890	9,683	35%	7,978	29%	10,229	37%
<b>Phoenix</b>								
	107101	2,341	570	24%	765	33%	1,006	43%
	107102	2,738	853	31%	904	33%	981	36%
	109200	2,405	1,005	42%	720	30%	680	28%
	109100	4,730	1,960	41%	1,393	29%	1,377	29%
	110200	319	173	54%	55	17%	91	29%
	110300	4,727	1,754	37%	1,131	24%	1,842	39%
	109300	2,392	1,090	46%	638	27%	664	28%
	110100	3,737	2,133	57%	808	22%	796	21%
	112100	2,025	1,395	69%	410	20%	220	11%
	112000	1,240	255	21%	380	31%	605	49%
<i>Phoenix Subtotal</i>		26,654	11,188	42%	7,204	27%	8,262	31%
<b>Total Study Area</b>		77,104	24,741	32%	22,315	29%	30,048	39%
<b>City of Peoria</b>		70,583	8,244	12%	19,771	28%	42,568	60%
<b>City of Glendale</b>		129,927	22,909	18%	33,278	26%	73,740	57%
<b>City of Phoenix</b>		795,297	185,968	23%	181,850	23%	427,479	54%
<b>Maricopa County</b>		1,934,957	338,591	17%	446,445	23%	1,149,921	59%

Source: US Census (2000)



## Exhibit 2.21 Educational Attainment

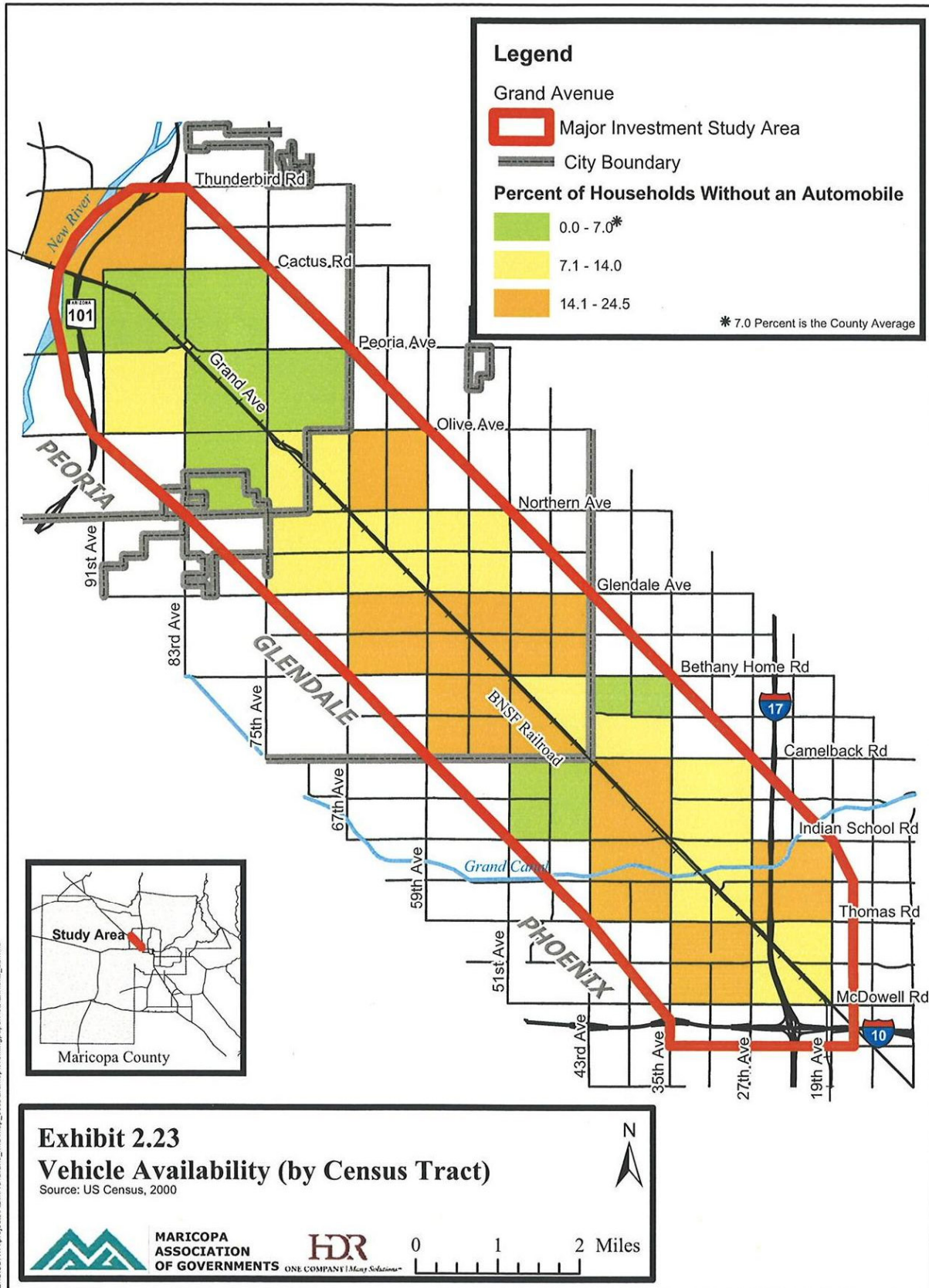




<b>Exhibit 2.22</b> <b>Vehicle Availability Summary</b>						
<b>Geography Id</b>	<b>Tract</b>	<b>Households</b>	<b>Percent Households with No Vehicle</b>	<b>Percent Households with 1 Vehicle</b>	<b>Percent Households with 2 Vehicles</b>	<b>Percent Households with 3+ Vehicles</b>
<b>Peoria</b>						
	71507	2,313	14.9%	40.5%	34.2%	10.3%
	71906	1,759	8.2%	33.8%	38.5%	19.5%
	71904	2,347	4.0%	35.9%	40.2%	19.9%
	71908	2,394	5.5%	38.6%	39.5%	16.4%
	71910	2,224	3.6%	34.3%	39.3%	22.8%
	71911	784	6.1%	17.3%	53.4%	23.1%
	92704	35	0.0%	37.1%	62.9%	0.0%
	92310	1,258	8.7%	52.2%	35.3%	3.8%
<i>Peoria Subtotal</i>		<i>13,114</i>	<i>7.3%</i>	<i>37.1%</i>	<i>39.0%</i>	<i>16.6%</i>
<b>Glendale</b>						
	92705	824	10.9%	54.4%	29.6%	5.1%
	92304	3,515	17.6%	55.1%	23.5%	3.8%
	92600	1,229	13.3%	56.3%	25.5%	4.9%
	92800	3,188	20.1%	46.2%	23.0%	10.7%
	92500	1,495	13.1%	50.2%	24.8%	11.9%
	92900	1,113	24.5%	40.1%	23.8%	11.6%
	93104	1,415	16.7%	56.3%	22.8%	4.2%
	93000	3,380	15.6%	45.4%	32.5%	6.4%
	93101	1,663	8.7%	47.8%	32.0%	11.5%
<i>Glendale Subtotal</i>		<i>17,822</i>	<i>16.2%</i>	<i>49.8%</i>	<i>26.4%</i>	<i>7.6%</i>
<b>Phoenix</b>						
	107101	1,222	6.2%	37.6%	42.6%	13.7%
	107102	1,654	12.9%	50.7%	23.3%	13.1%
	109200	1,565	18.5%	48.8%	26.4%	6.3%
	109100	2,526	7.3%	47.5%	30.1%	15.0%
	110200	171	12.3%	62.0%	25.7%	0.0%
	110300	2,770	17.9%	42.7%	30.5%	8.9%
	109300	1,122	3.6%	27.4%	51.5%	17.6%
	110100	1,903	15.7%	42.2%	28.0%	14.1%
	112100	958	17.4%	27.3%	37.4%	17.8%
	112000	765	10.3%	47.5%	34.8%	7.5%
<i>Phoenix Subtotal</i>		<i>14,656</i>	<i>12.7%</i>	<i>42.9%</i>	<i>32.1%</i>	<i>12.3%</i>
<b>Total Study Area</b>		<b>45,592</b>	<b>12.5%</b>	<b>43.9%</b>	<b>31.9%</b>	<b>11.7%</b>
<b>City of Peoria</b>		<b>39,245</b>	<b>5.2%</b>	<b>32.5%</b>	<b>46.2%</b>	<b>16.1%</b>
<b>City of Glendale</b>		<b>75,671</b>	<b>7.5%</b>	<b>35.7%</b>	<b>40.5%</b>	<b>16.3%</b>
<b>City of Phoenix</b>		<b>465,864</b>	<b>8.9%</b>	<b>39.5%</b>	<b>37.9%</b>	<b>13.7%</b>
<b>Maricopa County</b>		<b>1,132,886</b>	<b>7.0%</b>	<b>38.7%</b>	<b>40.1%</b>	<b>14.3%</b>

Source: US Census (2000)

## Exhibit 2.23 Vehicle Availability



## Socioeconomic Factors

Exhibit 2.24 presents a summary matrix of Title VI socioeconomic factors for the study area. In each instance, the Census Tracts are compared to the Maricopa County averages.

Exhibit 2.24 Summary of Socioeconomic Factors Exceeding County Average									
	Tract	Census Tracts with Percent Population Greater than that of Maricopa County for:							
		TITLE VI/ENVIRONMENTAL JUSTICE CRITERIA						Without a H.S. Diploma	Total of Socio- Economic Factors
		Age 60 Years and Older	Mobility Disability	Female Head of Hhld	Poverty	Minority	Households with No Vehicle		
Maricopa County		15%	12%	9%	12%	34%	7%	17%	0
<b>Peoria</b>									
	071507	36%	18%				15%		3
	071906		16%	12%		39%	8%	21%	5
	071904			18%		36%			2
	071908		14%	15%		35%		18%	4
	071910		13%	11%		39%		21%	4
	071911								0
	092704	17%	48%		45%	83%		22%	5
	092310		18%	24%	20%	42%	9%	26%	6
<i>Peoria portion of study area</i>			14%	13%		34%	7%		4
<b>Glendale</b>									
	092705		16%	18%	32%	63%	11%	39%	6
	092304	19%	18%	17%	13%	35%	18%	21%	7
	092600			16%	32%	57%	13%	35%	5
	092800			16%	32%	75%	20%	51%	5
	092500	20%	15%	12%	22%	59%	13%	35%	7
	092900		13%	15%	34%	84%	25%	49%	6
	093104		12%	29%	24%	55%	17%	38%	6
	093000		15%	22%	18%	51%	16%	28%	6
	093101	16%	13%	15%	15%	51%	9%	22%	7
<i>Glendale portion of study area</i>			14%	18%	24%	58%	16%	35%	6
<b>Phoenix</b>									
	107101		13%			53%		24%	3
	107102		14%	16%	28%	64%	13%	31%	6
	109200		14%	14%	28%	76%	18%	42%	6
	109100			10%	26%	71%	7%	41%	5
	110200		30%		43%	64%	12%	54%	5
	110300		16%	14%	30%	70%	18%	37%	6
	109300		14%	10%	22%	75%		46%	5
	110100		15%	13%	28%	86%	16%	57%	6
	112100		18%	18%	33%	88%	17%	69%	6
	112000	20%	17%		17%	43%	10%	21%	6
<i>Phoenix portion of study area</i>			15%	12%	26%	72%	13%	42%	6
<b>Study Area Average</b>			14%	15%	20%	57%	13%	32%	6
<b>City of Peoria</b>		18%	13%						2
<b>City of Glendale</b>				11%	12%	35%	8%	18%	5
<b>City of Phoenix</b>			13%	12%	16%	44%	9%	23%	6

Note: Shaded cells indicate that the value is at or below the County average.

Source: US Census (2000)

The following points highlight some of the socioeconomic factors identified for the study area:

- The minority population in the study area is 56 percent, compared to Maricopa County which has a minority population of 34 percent.
- Hispanics comprise 80 percent of the minority population in the study area.
- Three-quarters of the Census Tracts that make up the study area exceed the County average for households in poverty.
- Three-quarters of the Census Tracts that make up the study area exceed the County average for female heads of households with own children under 18 years of age.
- The percent of the study area population without a high school diploma (32 percent) is nearly double that of Maricopa County overall.
- Vehicle availability for households is a problem throughout the study area; with the percentage of households with no vehicle available (13 percent) nearly double that of Maricopa County.
- Twenty-two of the twenty-seven Census Tracts that comprise the study area have five or more socio-economic factors (Age 60 Years and Older, Mobility, Disability, Female Head of Household, Poverty, Minority, Households with No Vehicle, and Without a H.S. Diploma) above the County average, adding to the sensitivity of this area.



## **2.4 Potential Environmental Issues**

Hazardous materials are regulated under the authority of the Resource Conservation and Recovery Act (RCRA); the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), also known as Superfund; and the Superfund Amendments and Reauthorization Act (SARA) of 1986.

Hazardous waste is a waste with properties that make it dangerous or capable of having a harmful effect on human health or the environment. Hazardous waste is generated from many sources and may come in many forms, including liquids, solids, gases, and sludges. Sites listed within the study area corridor are at various levels of federal and/or state remedial concern.

The environmental concerns associated with hazardous materials necessitate that sites where they are handled, stored, transported and or used be documented. A search of over forty environmental databases was conducted by Environmental Data Resources, Inc. in April, 2004 (Appendix A includes a list of the specific databases consulted). A summary of the findings of this database search is shown in Exhibit 2.25. Exhibit 2.26 shows the location of the listed sites within the study area.

Due to the number of listed hazardous sites, an initial site assessment (ISA) should be conducted when future projects are identified that may affect a listed hazardous sites. The ISA would confirm or deny the presence of hazardous materials at specific locations.

<b>Exhibit 2.25 Hazardous Material Sites Summary</b>		
<b>FEDERAL ASTM STANDARD</b>	<b>Number of Sites</b>	<b>Search Radius (miles)</b>
CERCLIS	13	0.50
CERC-NFRAP	46	0.25
CORRACTS	1	1.00
RCRIS-TSD	6	0.50
RCRIS Large Quantity Generator	2	0.25
RCRIS Small Quantity Generator	178	0.25
ERNS	1	TP*
The following Federal ASTM Standard databases were searched and no records returned: NPL and Proposed NPL		
<b>STATE ASTM STANDARD</b>		
SPL	3	1.00
State Haz. Waste	111	-
LUST	168	0.25
UST	254	0.25
AZ WQARF	5	1.00
The following State ASTM Standard databases were searched and no records returned: State Landfill, Indian UST, Indian LUST		
<b>FEDERAL ASTM SUPPLEMENTAL</b>		
FINDS	170	TP*
PADS	3	TP*
TRIS	1	TP*
FTTS	1	TP*
The following Federal ASTM Supplemental databases were searched and no records returned: CONSENT, ROD, Delisted NPL, HMIRS, MLTS, MINES, NPL Liens, US Brownfields, Indian Reservations, DOD, RAATS, TSCA, SSTS		
<b>STATE OR LOCAL ASTM SUPPLEMENTAL</b>		
AZ Spills	12	TP*
The following State or Local ASTM Supplemental databases were searched and no records returned: AST, AZ DOD		
*TP – Target Property		

**Exhibit 2.26 Hazardous Material Sites**



E:\GISDATA\projects\AZMAG\Grand\_Avenue\_MIS\map\_data\map\_working\map\_working\Exhibit2\_26.mxd

### Cultural Resources

Several state and federal laws have been enacted to provide protection for historic and archaeological resources that are associated with important past events, themes, and people; and that are representative of periods and types of architecture, possess high artistic value; or that are likely to yield valuable information about the past. Specifically, potential cultural resources must be evaluated under the National Historic Preservation Act of 1966, the Archaeological Resources Protection Act of 1979, and the Arizona Historic Preservation Act of 1990 to ensure the protection of our cultural heritage.

A preliminary inventory was performed that identified previously recorded cultural resources. Cultural resource surveys were reviewed from a variety of sources, including: Arizona Department of Transportation (ADOT), the Arizona State Museum, Arizona State University, the State Historic Preservation Office (SHPO), and the Pueblo Grande Museum. Based on these sources previous surveys and known archaeological sites within the study area were identified. The number and type of resources are summarized in Exhibit 2.27. A detailed inventory of resources identified is included in Appendix B.

<b>Exhibit 2.27</b>							
<b>Types, Frequencies, and NRHP Status of Previously Recorded Cultural Resources</b>							
<b>Site Type</b>	<b>Total</b>	<b>NRHP Status</b>					<b>State Eligible</b>
		<b>Listed</b>	<b>Eligible</b>	<b>Potentially Eligible</b>	<b>Not Eligible</b>	<b>Not Evaluated/unknown</b>	
Prehistoric Habitation	2		1			1	
Prehistoric Canal Segments	14					14	
Historic Canal Segments	2					2	
Historic Structures/ Foundations	225	8	19	2	56	139	1
Historic Transportation (Structures/ Routes)	5		1		3	1	
Historic District	4	1	1	2			
<b>TOTAL</b>	<b>252</b>	<b>9</b>	<b>22</b>	<b>4</b>	<b>59</b>	<b>157</b>	<b>1</b>

When future projects are identified that may affect historic properties that are National Register of Historic Places (NRHP) eligible avoidance may be recommended. Mitigation of construction impacts through testing and data recovery may be considered as necessary.



## 2.5 Redevelopment Opportunities and Constraints

The 1999 Grand Avenue Major Investment Study Environmental Overview (Logan Simpson Design, 1999) characterized the majority of the visual landscape of the Grand Avenue Corridor as “urban industrial/commercial”. This visual landscape unit is characterized by built features, a lack of vegetation, and an abundance of structures and warehouses, and is further described as being extremely visually cluttered. Traveling west along Grand Avenue, where the railroad overpass occurs between Glendale and Peoria, the visual landscape changes to a “rural industrial/commercial” unit. Here the landscape of agricultural fields, undeveloped, and/or vacant lots becomes more common, and overhead utilities and signage are more scattered providing a more rural character.

### Billboards

The number of commercial outdoor advertising signs contributes to the visual clutter along Grand Avenue. Billboards can also represent an impediment to redevelopment, as they are costly for a municipality to acquire and remove. A total of 98 billboards were identified in the Grand Avenue study area, with 17 of these located in Peoria, 30 located in Glendale and the remaining 51 found in Phoenix. Exhibit 2.28 shows the approximate location of billboards along Grand Avenue in the study area.



*An example of a billboard found along Grand Avenue.*

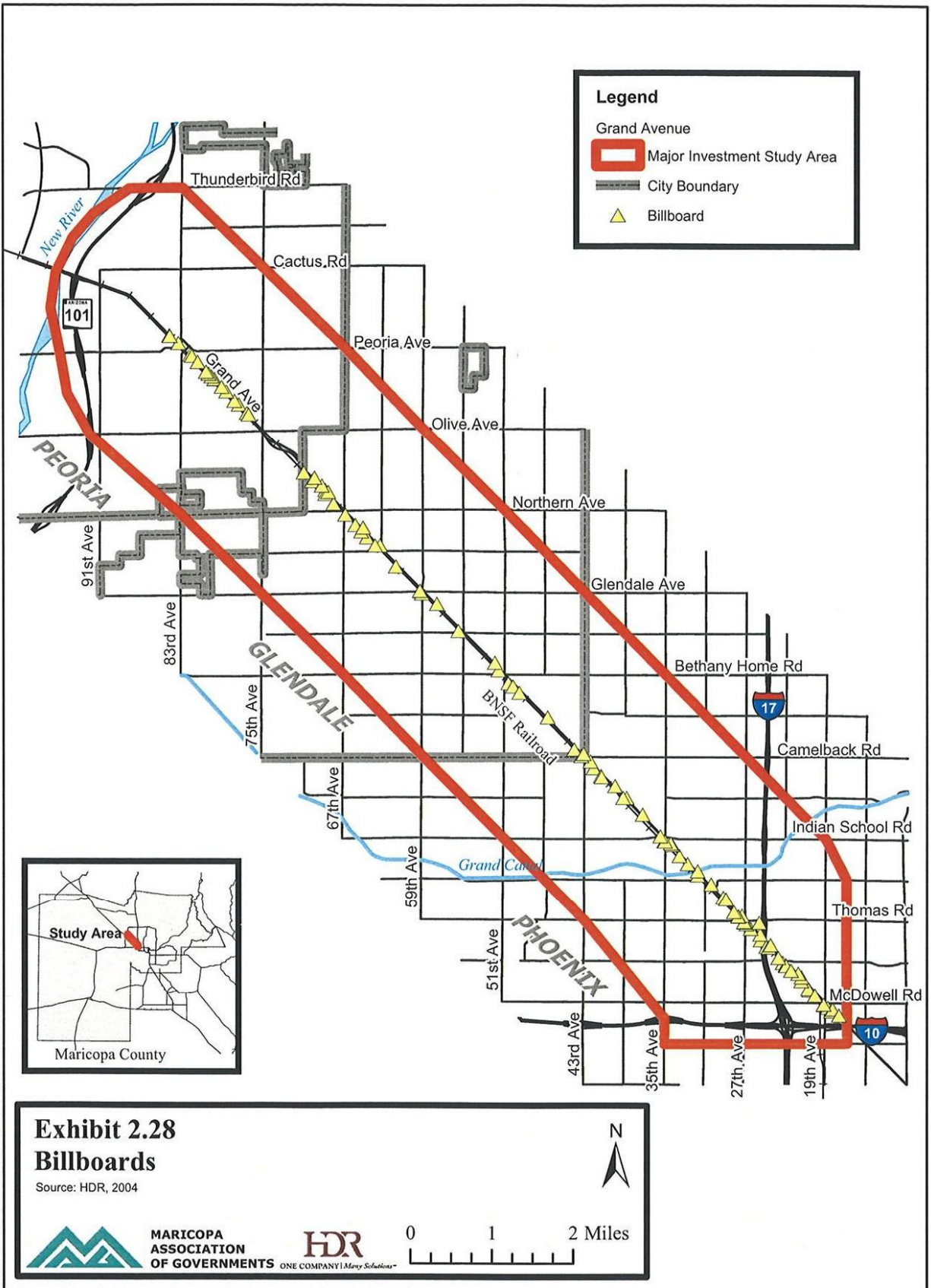
This section of the report specifically addresses billboards that are intended to advertise a business, commodity, service, entertainment, product, or attraction sold, offered, or existing elsewhere than on the property where the sign is located.

Billboards are constitutionally protected under the First Amendment (453 U.S. 490, *Metromedia Inc. v. City of San Diego*). Arizona Revised Statutes allows a municipality to acquire by purchase or condemnation private property for the removal of nonconforming uses and structures. A municipality may not discontinue a nonconforming billboard without paying just compensation, or allowing the billboard to be relocated to a comparable site (with removal, relocation and construction at the municipality’s expense (ARS 9-462.02. Nonconformance to regulations; outdoor advertising change; enforcement).

Each of the study area jurisdictions regulates the use of billboards through their respective zoning ordinances. The City of Peoria and Glendale allow the existing billboards, when properly maintained, as non-conforming uses. Phoenix permits billboards in the City as both conforming and non-conforming uses.

Nonconforming uses are land uses or an activity that existed legally prior to an ordinance change that no longer permits the use, and typically result from amendments to city code or rezoning. According to state law, the purpose for allowing nonconforming uses is to prevent the injustice of forcing retroactive compliance. State law also specifies that the right to continue a nonconforming use ceases once the use is utilized for a different purpose, regardless of whether a municipality offers compensation.

## Exhibit 2.28 Billboards



**Peoria no longer allows billboards to be placed in the City. Existing billboards are allowed to continue as a non-conforming use, provided that they are maintained in reasonable shape. Billboards that are greater than 50 percent destroyed must be razed and cannot be replaced.**

Glendale's zoning ordinance does not allow the construction of new billboards within the City, unless the person desiring placement of the new billboard submits evidence that a billboard has been removed.

Phoenix allows billboards, but only in zoning districts A-1, A-2, and C-3. As of 1999 there were over 2,250 billboards in Phoenix; of which 1,073 are nonconforming<sup>1</sup>.

### **Overhead Utilities**

Also contributing to the visual clutter discussed in the 1999 Environmental Overview are overhead utilities found in the corridor. The 1999 Grand Avenue Major Investment Study identified the location of major utilities throughout the Grand Avenue corridor. This section discusses the impact of overhead utilities along Grand Avenue.

Undergrounding (i.e. removing utility poles and burying wires and equipment in conduits or pipes) is the most comprehensive and effective method of reducing the visual impact of utility wires. Improving the aesthetic image of the Grand Avenue corridor may also result in attracting new businesses and stimulating economic development, assisting ongoing redevelopment efforts.



*Utility poles and wires along the north side of Grand Avenue at Northern Avenue.*

Major utility providers in the corridor identified in the The 1999 Grand Avenue Major Investment Study include the following:

- Arizona Public Service: 230 kV overhead power and smaller
- Salt River Project: 69 kV and smaller
- Salt River Project Water and Salt River Valley Users Association: irrigation lines and gates
- MCI-WorldCom fiber optic
- Burlington Northern Santa Fe Railroad
- Qwest Telephone
- City of Peoria, Glendale, and Phoenix: water, sewer, and storm drain
- Southwest Gas: natural gas lines
- Flood Control District of Maricopa County

Undergrounding of long sections of overhead utilities would have a positive visual affect on the Grand Avenue corridor. This is evidenced with the several grade separation

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<sup>1</sup> Arizona State Senate, 44th Legislature, First Regular Session. Minutes Of Committee On Government & Environmental Stewardship, March 22, 1999.

projects that have been completed, such as Thomas Road, where the utilities have been relocated and/or undergrounded.

Various methods for funding utility relocation exist. The Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21) provides transportation enhancement funds for utility burial or relocation under the categories of landscaping and scenic beautification. Other options related to the undergrounding of utilities may include identifying business/employment districts where assessment districts might be considered to fund such utilities. The development of these options must be responsive to legal issues related to the collection, holding and use of any such funds.

East of 31<sup>st</sup> Avenue the corridor is largely free of overhead utilities other than strung streetlights. Streetlights which are strung with a single cable between poles impose less clutter on the visual landscape than power lines and other utilities strung with multiple cables between poles. This is evidenced along the eastern portion of the corridor where there are few overhead utilities and the power for streetlights is underground. Grand Avenue grade separation improvements have included underground streetlight power, resulting in a less cluttered, and more visually attractive landscape.

230 kV overhead power runs along the southern side of Grand Avenue from 31<sup>st</sup> Avenue where it enters from the south, to the municipal border of Peoria where it turns west and out of the study area. Where Grand Avenue grade separation improvements have been completed this power is elevated above the separations.

Opportunities for undergrounding and consolidating service primarily exist along the north side of Grand Avenue. As alternatives are identified, opportunities for consolidating and undergrounding utilities will be further explored.

### **Redevelopment Opportunities**

Numerous efforts have been made to revitalize the Grand Avenue corridor over the past several decades, however, numerous vacant parcels continue to exist. In addition to reducing tax income for the cities in which they exist, vacant and abandoned parcels impose other economic and social costs on localities and neighborhoods by reducing property values, creating blight, and becoming targets for vandalism and criminal activity.

The State of Arizona, through Growing Smarter legislation first adopted in 1998, and Growing Smarter Plus in 2000, promotes infill development. Both versions promote infill development by identifying infill locations and special incentives, such as expediting zoning and processing, waiving municipal fees, and providing relief from development standards (Arizona Department of Commerce, 2003).

Within the Grand Avenue study area, there are over 120 acres of vacant parcels with frontage along Grand Avenue.

As Grand Avenue improvement alternatives are considered, parcels within 500 feet of Grand Avenue will be more thoroughly investigated to identify redevelopment opportunities.



## References

- Arizona Department of Transportation (ADOT), "Guidance on Title VI and Environmental Justice," Environmental Planning Section, July 30, 1997.
- Council of Environmental Quality, "Environmental Justice: Guidance under the National Environmental Policy Act," Executive Office of the President, December 1997
- Environmental Protection Agency, web site available at:  
<http://www.epa.gov/compliance/environmentaljustice/index.html>
- Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," February 11, 1994, 59 Federal Register at 7630
- Federal Highway Administration, "FHWA Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," December 2, 1998.
- Federal Highway Administration. 1998. Directive 6640.23, "FHWA Actions to Address Environmental Justice in Minority Populations and Low-Income Populations". U.S. Department of Transportation, Federal Highway Administration, December 2, 1998.
- Maricopa Association of Governments. 2001. MAG Process for Public Involvement in Transportation Planning, May 14, 2001.
- Maricopa Association of Governments. 2001b. Maricopa Association of Governments Regional Transportation Plan Update: Demographics and Social Change Issue paper, June 2001.
- Oakland, Ca. 2001. The 2001 Regional Transportation Plan Equity Analysis and Environmental Justice Report. Metropolitan Transportation Commission, Oakland, California.
- U.S. Department of Transportation, Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," February 11, 1994.
- U.S. Department of Transportation's Order on Environmental Justice, "Notice of Final DOT Order on Environmental Justice," Department of Transportation, April 15, 1997.
- U.S. Department of Transportation's Proposed Order on Executive Order 12898, "Department of Transportation Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," Department of Transportation, July 27, 1995.
- U.S. Environmental Protection Agency, "Final Guidance for Incorporating Environmental Justice Concerns in EPA's NEPA Compliance Analysis," Office of Federal Activities, April 1998

## **Appendix A Environmental Databases**

Databases that were consulted include:

1. Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS)
2. CERCLIS sites designated “No Further Remedial Action Necessary” (CERCLIS-NFRAP)
3. National Priority List (NPL)
4. Proposed National Priority List Sites (Proposed NPL)
5. National Priority List Deletions (Delisted NPL)
6. RCRA Corrective Action Activity list (CORRACTS)
7. Resource Conservation and Recovery Information System (RCRIS)
8. RCRIS Treat, Store and Dispose facilities list (RCRIS-TSD)
9. RCRIS Large Quantity Generators list (RCRIS-LQG)
10. RCRIS Small Quantity Generators list (RCRIS-SQG)
11. Emergency Response Notification System (ERNS)
12. Sites and potential sites within the jurisdiction of the Superfund Program Section (AZ SPL)
13. State (of Arizona) Hazardous Waste Sites (SHWS)
14. Leaking Underground Storage Tank Incident Reports (LUST)
15. Underground Storage Tank database (UST)
16. Water Quality Assurance Revolving Fund list (WQARF)
17. Federal Facility Index System (FINDS)
18. PCB Activity Database (PADS)
19. Toxic Chemical Release Inventory System (TRIS)
20. Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)
21. Toxic Substance Control Act (TSCA) Tracking System (FTTS)
22. Arizona Department of Environmental Quality Chemical Spills and Incidents list (AZ Spills)
23. (Arizona) Water Treatment Facilities list (WWFAC)
24. Drywells databases and various Brownfields databases (DEUR and VEMUR sites)

Additional ASTM Supplemental databases consulted include

25. Directory of Solid Waste Facilities (SWF/LF)
26. Underground Storage Tanks on Indian Land (INDIAN UST)
27. Leaking Underground Storage Tanks on Indian Land (INDIAN LUST)
28. Consent Decrees (CONSENT)
29. Superfund (CERCLA), Records Of Decisions (ROD)
30. Hazardous Materials Information Reporting System (HMIRS)
31. Material Licensing Tracking System (MLTS)
32. Mines Master Index File (MINES)
33. Liens
34. Federal Superfund Liens
35. Brownfields Sites
36. Indian Reservations
37. Department of Defense Sites (DOD)
38. RCRA Administrative Action Tracking System (RAATS)
39. Toxic Substances Control Act (TSCA)
40. Section 7 Tracking Systems (SSTS)
41. List of Aboveground Storage Tanks (AST)
42. Arizona Department of Defense Sites (AZ DOD)
43. Arizona Airs Database (AZ AIRS)

## Appendix B Previously Recorded Cultural Resources

Previously Recorded Cultural Resources				
Site / Property No.	Name / Description	Address / Location	Eligibility Recommendations	Reference
AZ T:12:14 (ASM)	Prehistoric Artifact Scatter	51st / Bethany Home	Unknown	Grafil et. al. 2000
AZ T:12:10 (ASM);				
GA-A1	Las Colinas- large Hohokam site	I-17 to 27th Ave., Van Buren to Thomas	Eligible	Janus Associates, Inc. 1986; Curtis 1989
	Prehistoric Canal	~1/2 mile to NE in N ½ of Section 25, T2N, R2E	Not evaluated	Curtis 1989; Turney Map
	Prehistoric Canal	N ½ of Section 22, T2N, R2E	Not evaluated	Curtis 1989; Turney Map
	Prehistoric Canal	SW ¼ of Section 16, T2N, R2E	Not evaluated	Curtis 1989
	Prehistoric Canal	Within ¼ mile to NE in SE ¼ of Section 31, T2N, R2E	Not evaluated	Curtis 1989; Turney Map
	Prehistoric Canal	Within ¼ mile to NE in W ¼ of Section 31, T2N, R2E and NE ¼ of Section 36, T2N, R2E	Not evaluated	Curtis 1989; Turney Map
	Prehistoric Canal	Vicinity of Grand Ave. and 20th Drive	Not evaluated	SHPO map
	Prehistoric Canal	Vicinity of Grand Ave. and 22nd Avenue	Not evaluated	SHPO map
	Prehistoric Canal	Vicinity of Grand Ave. and 27th Ave	Not evaluated	SHPO map
	Prehistoric Canal	Vicinity of Grand Ave. and 28th Ave	Not evaluated	SHPO map
	Prehistoric Canal	Vicinity of Grand Ave. and 29th Ave.	Not evaluated	SHPO map
	Prehistoric Canal	Vicinity of Grand Ave. and east of 31st Ave.	Not evaluated	SHPO map
	Prehistoric Canal	Vicinity of Grand Ave. and west of 31st Ave.	Not evaluated	SHPO map
	Prehistoric Canal	Grand Ave. and east of 35th Ave	Not evaluated	SHPO map



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	Prehistoric Canal	Grand Ave. and 38th Ave	Not evaluated	SHPO map
	Historic Maricopa Canal	Intersection of Sections 25, 26, 35, 36, of T2N, R2E (portion crossing Grand Avenue abandoned between 1904 and 1915)	Not evaluated	Curtis 1989
	Historic Grand Canal	N½ of Section 26, T2N, R2E	Not evaluated	Curtis 1989
	Peoria Central School	10304 N. 83rd Avenue	Listed (1985)	NRHP Database
	Beet Sugar Factory	5243 W. Glendale Avenue	Listed (1978)	NRHP Database
	Glendale Woman's Club Clubhouse	7032 N. 56th Avenue	Listed (1989)	NRHP Database
GA-24	Peoria High School Admin. Building	11152 N. 83rd Ave., Peoria	Unknown	Janus Associates, Inc. 1986
GA-25	Peoria High School Building	11200 N. 83rd Ave., Peoria	Eligible	Janus Associates, Inc. 1986
GA-10	PWA State Headquarters Building	1824 W. McDowell	Eligible	Janus Associates, Inc. 1986
GA-11	A.E. Sherid Boarding House	2010 W. Palm Lane	Unknown	Janus Associates, Inc. 1986
	House- Ranch Style	2601 W. Verde Lane	Not Eligible	Grafil et. al. 2000
	House- Ranch Style (1951)	2607 W. Verde Lane	Not Eligible	Grafil et. al. 2000
	House- Ranch Style (1951)	2611 W. Verde Lane	Not Eligible	Grafil et. al. 2000
	House- Ranch Style (1955)	2617 W. Verde Lane	Not Eligible	Grafil et. al. 2000
	House- Ranch Style (1949)	2621 W. Verde Lane	Not Eligible	Grafil et. al. 2000
	House- Ranch Style (1949)	2627 W. Verde Lane	Not Eligible	Grafil et. al. 2000
	House- Ranch Style (1949)	2631 W. Verde Lane	Not Eligible	Grafil et. al. 2000
	House- Ranch Style (1949)	2637 W. Verde Lane	Not Eligible	Grafil et. al. 2000
	Alhambra Court (1951)	2830 Grand Ave.	Not Eligible	Grafil et. al. 2000; Woodward 1993

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	Byron Jackson Co. Building (1951)	2906 Grand Ave.	Not Eligible	Grafil et. al. 2000; Woodward 1993
	House- Spanish Colonial	3040 27th Ave	Not Eligible	Grafil et. al. 2000
GA-15; 31	Josiah Harbert Store Building (1892)	3138 Grand Ave.	Eligible	Janus Associates, Inc. 1986; Woodward 1993
GA-13	Miller and Johns Co. Warehouse (1954)	3301 Grand Ave.	Unknown	Janus Associates, Inc. 1986; Woodward 1993
GAC-09	House - Johnson Place Plat	4107 W. Camelback Road	Not Eligible	Grafil and Abele 2001
GA-12; 35	Harry Kay Farm House (1910-1916)	4204 N. 35th Avenue	Potentially Eligible	Janus Associates, Inc. 1986; Woodward 1993
	Workers Cabin- No form completed; Demolished; (1918-1930)	4360 N. Grand Avenue	Not Eligible	Grafil and Abele 2001; Woodward 1993
GAC-10	House; Vee Gee Court (1925)	4460 N. Grand Ave	Not Eligible	Grafil and Abele 2001; Woodward 1993
GAC-11	Roderick Farm House (1918-1930)	4468 Grand Avenue	Not Eligible	Grafil and Abele 2001; Woodward 1993
GAC-04	House - Johnson Place Plat (1938)	4802 N. 41st Drive	Not Eligible	Grafil and Abele 2001; Woodward 1993
GAC-05	House - Johnson Place Plat (1938)	4806 N. 41st Drive	Not Eligible	Grafil and Abele 2001; Woodward 1993
39	Hircock / McClure Farm House (1900-1910)	4813 N. 42nd Ave.	Not Eligible; Potentially Eligible	Grafil et. al. 2000; Woodward 1993
GAC-06	House - Johnson Place Plat	4814 N. 41st Drive	Not Eligible	Grafil and Abele 2001
GAC-01	House- Rundell Tract, McClure Farm (1928-1930)	4819 N. 42nd Ave	Not Eligible	Grafil and Abele 2001; Woodward 1993
GAC-02	House- Rundell Tract, McClure Farm (1928-1930)	4823 N. 42nd Ave	Not Eligible	Grafil and Abele 2001; Woodward 1993
GAC-03	House- Rundell Tract, McClure Farm (1928-1930)	4827 N. 42nd Ave	Not Eligible	Grafil and Abele 2001; Woodward 1993

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43	House- No form completed; Demolished; (1928-1930)	4837 N. 42nd Ave	Not Eligible	Grafil and Abele 2001; Woodward 1993
GAC-07	House - Johnson Place Plat	4905 N. 41st Drive	Not Eligible	Grafil and Abele 2001
GAC-08	House - Johnson Place Plat	4909 N. 41st Drive	Not Eligible	Grafil and Abele 2001
	House- Vernacular wood (1961)	4970 Cavalier Drive	Not Eligible	Grafil et. al. 2000
	House- Vernacular wood (1945)	4974 Cavalier Drive	Not Eligible	Grafil et. al. 2000
	House- Vernacular wood (1955)	5006 Cavalier Drive	Not Eligible	Grafil et. al. 2000
	House- Vernacular wood (1954)	5008 Cavalier Drive	Not Eligible	Grafil et. al. 2000
51	Alex L. Silva House (1895-1900)	5035 W. Bethany Home Road	Eligible; Potentially Eligible	Grafil et. al. 2000; Woodward 1993
	Bugas Propane Company Building	5732-B N. 51st Ave	Not Eligible	Grafil et. al. 2000
1	Trails End Motel	5746 Grand Ave	Not Eligible	Doyle 2001
GL-189	Humphrey and Davidson Building	5819 W. Glendale Ave, Glendale	Eligible	Janus Associates, Inc. 1986
12	House (1945)	5851 Myrtle Ave	Listed on NRHP; Contributing to Catlin Court House Dist	Doyle 2001
25	House (1915 / 1968)- Orchard Addition	5907 Lamar Road	Not Eligible	Doyle 2001
26	House (1960)- Orchard Addition	5911 Lamar Road	Not Eligible	Doyle 2001
27	House (1925 / 1951) – Orchard Addition	5912-14 Lamar Road	Not Eligible	Doyle 2001
4	House (1935)	5913 W. Palmaire Ave	Not Eligible	Doyle 2001
GA-18	Rock Cottage Auto Court	5956 W. Palmaire, Glendale	Eligible	Janus Associates, Inc. 1986
3	Thunderbird Radiator	5986 and 5988 Grand Ave	Not Eligible	Doyle 2001
GL-178	House- Adobe Revival	6024 W. Myrtle, Glendale	Eligible	Janus Associates, Inc. 1986
GL-114; 108	William Weigold House (1910)	6101 W. Palmaire, Glendale	Determined Eligible	Janus Associates, Inc. 1986; Woodward 1993

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GL-115; 107	Ray Weigold House (1910)	6115 W. Palmaire, Glendale	Determined Eligible	Janus Associates, Inc. 1986; Woodward 1993
	House – Ranch style	6211 N. 51st Ave	Not Eligible	Grafil et. al. 2000
	House (1950)	6217 N. 51st Ave	Not Eligible	Grafil et. al. 2000
	House (1949)	6223 N. 51st Ave	Not Eligible	Grafil et. al. 2000
	House- Vernacular Bungalow (1935)	6235 N. 51st Ave	Not Eligible	Grafil et. al. 2000
35	House (1945)- Zenia Tract	6518 N. 57th Ave	Not Eligible	Doyle 2001
36	House (1950)- Zenia Tract	6526 N. 57th Ave	Not Eligible	Doyle 2001
AZ T:8:146 (ASM)	House remnants- historic	6535 59th Ave	Not Eligible	Grafil 2001
38	House (1940)- Zenia Tract	6538 N. 57th Ave	Not Eligible	Doyle 2001
39; 55	House (1945)- Zenia Tract	6542 N. 57th Ave	Not Eligible	Doyle 2001; Woodward 1993
21	Arizona Survey and Mapping (1955)	6722 N. 59th Ave	Not Eligible	Doyle 2001
22; 75	Harold W. Smith House (1936; 1926-1927) – Orchard Addition	6734 N. 59th Ave	Not Eligible; Potentially Eligible	Doyle 2001; Woodward 1993
23; 76	House (1944; 1930)- Orchard Addition	6738 N. 59th Ave	Not Eligible	Doyle 2001; Woodward 1993
29; 77	House (1940; 1928)- Orchard Addition	6814 N. 59th Ave	Not Eligible	Doyle 2001; Woodward 1993
32	House (1940)- Orchard Addition	6816 N. 59th Ave	Not Eligible	Doyle 2001
30; 78	Bessie Ross House (1930; 1916-1923)- Orchard Addition	6818 N. 59th Ave	Not Eligible	Doyle 2001; Woodward 1993
31; 79	Worker's Cabin (1920; 1932-1935)- Orchard Addition	6822 N. 59th Ave	Not Eligible	Doyle 2001; Woodward 1993
GL-159; 86	Sine Brothers Hardware Building (1912-1923)	6829 N. 58th Drive, Glendale	Eligible	Janus Associates, Inc. 1986; Woodward 1993
GL-158; 13; 113	First National Bank of Glendale (1918; 1913)	6838 N. 58th Drive; 6838 N. 59th Ave	Listed (1983)	Janus Associates, Inc. 1986; Doyle 2001; Woodward 1993

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GL-125; 88	C.H. Tinker House (1913) – South First Street Historic District	6838 N. 59th Drive, Glendale	Determined Eligible	Janus Associates, Inc. 1986; Woodward 1993
8	Messinger House	7141 N. 59th Ave	Listed on NRHP; Contributing to Catlin Court House Dist	Doyle 2001
11	Commercial Bldg. (1917)	7157 N. 59th Ave	Listed on NRHP; Contributing to Catlin Court House Dist	Doyle 2001
GA-21; 114	James H. Wagoner Farm House (1912)	71st Ave. / Butler, Peoria	Eligible; Potentially Eligible	Janus Associates, Inc. 1986; Woodward 1993
GL-104	W.C. Welsh Rental House	7304 N. 61st Ave, Glendale	Eligible	Janus Associates, Inc. 1986
GA-20; 16; 115	H. C. Mann House (1910) and Farm Buildings	75th Ave. / Olive, Peoria	Eligible for State Register; Potentially Eligible	Janus Associates, Inc. 1986; Doyle 2001; Woodward 1993
GA-19; 14	Packing House; Triple R Sales	7831 N. 67th Ave., Glendale	Not Eligible	Janus Associates, Inc. 1986; Doyle 2001
GA-22	Peoria Ginning Co. Cotton Gin	79th Ave. / Grand Ave., Peoria	Eligible	Janus Associates, Inc. 1986
GA-23; 117	Valley Ginning Co. Cotton Gin (1926)	81st Ave. / Grand Ave., Peoria	Eligible	Janus Associates, Inc. 1986; Woodward 1993
GA-26	Peoria Hotel	8325 W. Washington, Peoria	Unknown	Janus Associates, Inc. 1986
GA-27	First Presbyterian Church	83rd Ave. / Madison, Peoria	Eligible	Janus Associates, Inc. 1986
GA-33	Central School	83rd Avenue / Madison, Peoria	Listed on NR	Janus Associates, Inc. 1986
GA-14	Alhambra Mercantile Co. Warehouse	Grand Ave.	Eligible	Janus Associates, Inc. 1986
GA-16; 38	Alhambra School Auditorium (1921)	Grand Ave.	Eligible; Potentially Eligible	Janus Associates, Inc. 1986; Woodward 1993
GA-9	Mining and Mineral Building	N. 19th Ave.	Eligible	Janus Associates, Inc. 1986
	House - Abandoned	N. of 6235 N. 51st Ave	Not Eligible	Grafil et. al. 2000



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AZ T:12:63 (ASM); AZ T:12:2 (ARS)	Three concrete slabs (1900-1930)	Northwest corner of Grand, Thomas, and 27th Aves.	Potentially Eligible	Curtis 1989; Grafil et. al. 2000
	Lory Meat Company	West of 51st Ave, south of Bethany Home Road	Not Eligible	Grafil et. al. 2000
AZ T:8:147 (ASM)	Possible historic habitation / commercial building	South of Grand Ave. and north of Orangewood Ave.	Not Eligible	Grafil 2001
	Grand Avenue		Not Eligible	Grafil et. al. 2000
GA-B1	Santa Fe R.R. Bridge at Grand Canal	R.R. R/W / Grand Canal	Unknown	Janus Associates, Inc. 1986
GA-B2; 15	Peoria Underpass (1936)	U. S. 60 at MP 152.20 / Grand Ave SE of 75th Ave	Not Eligible	Janus Associates, Inc. 1986; Doyle 2001
	Santa Fe Prescott and Phoenix RR; Atchison Topeka and Santa Fe RR; Burlington Northern Santa Fe RR	Parallels Grand Avenue (constructed in 1893)	Not Eligible	Curtis 1989; Grafil et. al. 2000
GA-A2	Historic Grand Avenue Streetcar System (1889-1948) a.k.a. Valley Street Railway Co.	Grand Ave. / Van Buren to McDowell	Eligible; subsurface remnants may be present	Janus Associates, Inc. 1986
	Zenia Tract (platted in 1947)	W. of 57th Ave between McLellan and Maryland	Potential Historic District	Doyle 2001
	Orchard Addition (platted in 1908); South First Street Historic District	W. of 59th Ave btwn Glendale and Ocotillo	Potential Historic District	Doyle 2001
	Federal Compress and Warehouse Complex	51st Ave / Bethany Home	Eligible	Grafil and Abele 2001
	Catlin Court Historic District	Palmaire and Myrtle from 57th Ave to 59th Ave	Listed on NRHP (1992)	Doyle 2001
*	84 Historic Buildings	Along Grand Ave	Varies	Woodward 1993
*	50 + Buildings on historic maps	Glendale, Alhambra, and Phoenix	Not evaluated	Curtis 1989